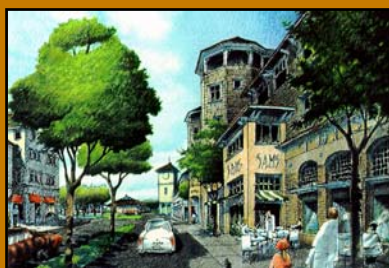


# Statewide Transit-Oriented Development Study

## *Factors for Success in California*



## TECHNICAL APPENDIX

September 2002

**BUSINESS, TRANSPORTATION  
and HOUSING AGENCY**

**CALIFORNIA  
DEPARTMENT  
OF TRANSPORTATION**



Business,  
Transportation  
and Housing



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## Appendix to Chapter 1: Transit-Oriented Design Guidelines for Sacramento County

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### Peter Calthorpe's TOD Guidelines:

Some of the earliest TOD guidelines ever produced were completed in 1990 by Peter Calthorpe Associates for the County of Sacramento (California) Planning Department.<sup>1</sup> In these guidelines, Peter Calthorpe states that the TOD concept may be applied on infill sites, those with potential for redevelopment, and in urban growth areas where he envisions new developments. Further, each TOD will have a Secondary Area adjacent to it that includes lands no further than one mile from the transit stop. For transit to be economically viable, uses near transit stops must have a minimum average residential density of 12 units per acre, and commercial uses must create a high level of pedestrian activity. The street network must provide multiple direct street and bicycle connections to the transit stop and core area without use of an arterial.

Secondary Areas may have lower- density housing, public schools, community parks, intensive employment-generating uses, and Park-and-Ride lots. Competing retail uses are not allowed in the Secondary Area. The Secondary Area is intended to provide for uses that are not appropriate in TODs because they are auto-oriented. These areas will support TOD businesses and generate riders for the transit system. The TOD concept maintains an 8-to-1 ratio of single-family surrounding Secondary land area to TOD land area. By maximizing street connections and making it convenient for residents to bike to transit, many auto trips will be kept off of arterials.

### Location Criteria

Calthorpe created the following design guidelines as criteria for site selection.

1. The TOD site must be located either on an express transit system, with service on 10- to 15-minute headways, or on a feeder bus line network within 10 minutes transit travel time from the express transit system.

Justification: The fundamental purpose of TODs is to create a land use pattern that will support transit. In order to successfully reduce auto travel, TODs must be located within easy walking distance of, or with very convenient feeder bus connections to, dedicated transit lines.



2. The TOD site must be located within an Urban Growth Boundary or Urban Policy Area.

Justification: A fundamental premise of TODs must be to limit sprawl by clustering development in serviceable areas that encourage compact and efficient urban forms.

3. TOD concepts can be applied to primarily undeveloped sites in urban growth areas served by an express transit system or within 10 minutes transit travel time along a feeder bus line. TODs in urban growth areas may be surrounded by Secondary Areas.

Justification: TODs are an opportunity to promote efficient development patterns in newly developing areas. Urban growth areas should be developed as a series of TODs linked by transit systems.

4. TOD concepts can be applied to infill and redevelopment sites located in urbanized areas with existing uses. They must have available infrastructure capacities on and adjacent to the site and be located on the express transit system or within 10 minutes transit travel time along a feeder bus line.

Justification: Implementation of the TOD concept on infill and redevelopment sites has the opportunity to redefine development patterns from auto-oriented to transit-oriented. Careful consideration must be given to the selection of appropriate sites to ensure that any traffic and utility constraints are not exacerbated.

5. TOD concepts can be applied to existing retail, office, and industrial sites by adding mixed-uses with structured parking on existing surface parking lots.

Justification: To encourage compact metropolitan growth patterns, existing underutilized lands should be redeveloped as TODs, particularly sites at or adjacent to existing or planned transit stops.

### **Site Criteria**

1. In Urban Growth Areas, TOD sites must be at least 40 acres and no more than 160 acres in size. These TOD sites must be complemented by Secondary Areas.

Justification: In Urban Growth Areas, 40 acres is the minimum area necessary to develop a TOD that can function as a mixed-use transit-oriented destination. A one-quarter-mile radius is equivalent to 160 acres.

2. Infill and redevelopment sites must be at least 20 acres and no more than 160 acres in size. Sites with the minimum acreage must be at least 80% vacant or developable.

Justification: Infill sites have the advantage of adjacent development and existing infrastructure. As long as the adjacent uses are supportive and allowed to act as an extension of the TOD, the minimum site size can be as small as 20 acres. Less than that will not allow the TOD to function effectively. If the site has a large percentage of economically viable uses that are unlikely to redevelop, application of the TOD design guidelines may not be successful in creating a transit-oriented community.

3. The TOD must not contain land further than 2,000 feet from a transit stop. The Secondary Area may contain land no further than one mile from the stop.

Justification: To encourage transit use, the stop should be convenient and highly accessible by foot or bicycle from all areas of the TOD.

4. Regardless of the number of property owners, the TOD application must consist of a comprehensive TOD Development Plan or Specific Plan.

Justification: The greater the number of property owners, the more difficult it will be to reach consensus on plans. Property owners must work together and with the jurisdiction to formulate development plans and implementation mechanisms for the entire site.

## Appendix to Chapter 2: Methodology for Estimating Energy Conservation and Climate Change Benefits of TOD

**Primary Author/Researcher of this Section: Daniel Mayer,  
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In this section of the Appendix, the methodologies that were used to estimate several of the environmental benefits of TOD discussed in Chapter 2 of the report are presented. These estimates are based on data from available research that is related to this subject. Also presented are the actual calculations that were used to derive these estimates.

### I. Reduced Energy Consumption: Gallons of Gasoline Saved

Chapter 2 Section VII (“Reduced Energy Consumption”) of the Report states that; “[A TOD] household could consume 250 to 380 fewer gallons of gasoline each year, on average [compared with an average suburban home with an annual VMT of 25,000 miles].”

#### Methodology

For this calculation the researcher calculated the energy savings of living in a TOD vs. a suburban neighborhood and converted this into gallons of gasoline. In order to do this, VMT savings were converted to BTUs (British Thermal Units – a measure of energy<sup>i,2</sup>) and then gallons of gasoline. (VMT savings were taken from Cal EPA ARB data; conversion of VMT to BTU was accomplished using Oak Ridge National Laboratory Data; conversion of BTU to gallons of gasoline was accomplished using US Environmental Protection Agency data).

**Calculations & Citations** (NOTE: Actual calculations are indented)

#### VMT reductions per TOD household/year

Typical annual VMT for suburban household.....	25,000 miles <sup>3</sup>
VMT saved for living in a TOD vs. suburbia.....	20% to 30% <sup>4</sup>
(25,000 VMT/household/year) * (0.20)	= 5,000 VMT/household/year savings
(25,000 VMT/household/year) * (0.30)	= 7,500 VMT/household/year savings

#### BTU reductions per TOD household/year (using above results)

1 VMT.....	5,822 BTU <sup>5</sup>
------------	------------------------

<sup>i</sup> BTU: One Btu is the quantity of energy in the form of heat required to raise the temperature of one pound of water one degree Fahrenheit).

<sup>ii</sup> The Statewide TOD Study report refers to a study by the California Air Resources Board in 1995 that estimated the transportation benefits of TOD at the household level. The ARB study found that, “significantly increasing walking and transit opportunities” along with strategically-located moderate- to high-density development, could achieve an annual reduction in VMT of between 20-30% per TOD household (as compared to typical sprawl-style development.)”

(5,000 VMT/household/year savings) \* (5,822 BTU/VMT) = 29.11 million BTU

(7,500 VMT/household/year savings) \* (5,822 BTU/VMT) = 43.67 million BTU

**Gallons of gasoline saved per TOD household/year (using above results)**

1 gallon of gasoline ..... 114,500 BTU in summer, <sup>6</sup>

1 gallon of gasoline ..... 112,500 BTU in winter <sup>7</sup>

[(114,500 BTU/gallon) + (112,500 BTU/gallon)] / 2 = 113,500 BTU/gallon

(29.11 million BTU /household/year) / (113,500 BTU/gal.) = **256.5 gallons**/household/year

(43.67 million BTU /household/year) / (113,500 BTU/gal.) = **384.8 gallons**/household/year

## II. Reduced Energy Consumption: Power Equivalence

Chapter 2 Section VII (“Reduced Energy Consumption”) of the Report states that; *“If the energy content of that gasoline [250 – 380 gallons] were converted into electricity, it could power a home for 5-7 months per year on the energy saved.”*

### Methodology

The amount of energy savings calculated in Section I. was converted into kilowatt-hours and then expressed in months of usable electricity. In order to do this, the researcher first used the previously calculated number of BTUs saved per year for a TOD household (calculated in Section I.) and calculated the amount of usable energy (expressed in BTU) that would be left over after power generation and distribution (using CEC data<sup>8,9</sup>). Then, the researcher converted this energy into the form used in a home (kilowatt-hours). This data was then expressed as the number of months an average Californian home could be powered with the energy saved (using CEC data<sup>10</sup>). These data were then rounded to the nearest month for inclusion in the main body of the report.

### Calculations & Citations (Continued from Section 1)

**Amount of energy left over after standard production & distribution inefficiencies are subtracted**

Thermal efficiency of a typical power generator.....35% (65% lost as heat) <sup>11</sup>

BTU savings/household/year (calculated in Section 1)..... 29.11 – 43.67 billion BTU/year

(29.11 million BTU/year) \* (0.35) = 10.19 million BTU/year

(43.67 million BTU/year) \* (0.35) = 15.28 million BTU/year

Amount of power lost during transmission.....~4% <sup>12</sup>

(10.19 million BTU/year) \* (0.96) = 09.78 million BTU/year

(15.28 million BTU/year) \* (0.96) = 14.67 million BTU/year

**kWh reductions per TOD household/year (using above results)**

1 kWh. .... 3,412 BTU

(09.78 million BTU /household/year) / (3,412 BTU/kWh) = **2.867 thousand kWh**/household/yr

(14.67 million BTU /household/year) / (3,412 BTU/kWh) = **4.299 thousand kWh**/household/yr

**Months an average Californian home could be powered with the saved energy (using above results)**

“Rule of Thumb” energy usage/household .....600 kWh/month <sup>13</sup>

(2.867 thousand kWh) / (600 kWh/month) = **4.778 months**

(4.299 thousand kWh) / (600 kWh/month) = **7.165 months**



### III. Reduced Energy Consumption: Savings on Vehicle Expenses

Chapter 2 Section VII (“Reduced Energy Consumption”) of the report states that; *“Furthermore, using AAA ‘Total Cost of Ownership’ data, a \$3,000 to \$4,000 annual savings on vehicle-related expenses is possible for each TOD household due to reduced driving costs.”*

#### Methodology

For this calculation the researcher determined the reduction in VMT that would be experienced between a TOD vs. a suburban household (calculated in Section I. by using ARB data). The researcher then converted these VMT savings into monetary savings by multiplying the VMT savings by the Cost per Mile AAA data. These data were then rounded to the nearest thousand for inclusion in the main body of the report.

#### Calculations & Citations (Continued from Section I.)

##### Monetary savings of living in a TOD (reduced vehicle costs) <sup>i</sup>

Total Cost of Ownership, Cost per Mile.....	45.8 cents/mile <sup>14</sup>
VMT reduction per TOD household (calculated in Section 1)	= 5,000 to 7,500 miles
(\$0.458/mile) * (5,000 miles)	= \$2,290
(\$0.458/mile) * (7,500 miles)	= \$3,435

**AAA Data is based on 20,000 miles/yr.; ARB Data is based on 25,000 miles/yr.**

**Therefore, the operating cost (gas, oil, maintenance & tires) for 5,000 mi. must be added**

AAA Composite National Average, Operating Costs only, 2001... <sup>15</sup>	13.6 cents/mile
(\$0.136/mile) * (5,000 miles)	= \$680
(\$2,485) + (\$680)	= <b>\$2,970</b>
(\$3,728) + (\$680)	= <b>\$4,115</b>

### IV. Reduced Greenhouse Gas Emissions: Per-Household CO<sub>2</sub> Reduction

Chapter 2 Section VII (“Lower ‘Greenhouse Gas’ Emissions”) of the ‘Statewide TOD Study’ report states: *“The average TOD household could emit 2.5 to 3.7 tons less CO<sub>2</sub> yearly than its non-TOD counterpart.”*

#### Methodology

For this calculation the researcher determined the amount of gasoline that a TOD household could save per year compared with a suburban household, and then +converted that into tons of CO<sub>2</sub> emitted per year. In order to do this, the researcher took the previously calculated gasoline figures (calculated in Section I.) and multiplied that by the amount of CO<sub>2</sub> emitted per gallon of gasoline burned. These data were then expressed in tons and rounded to the nearest tenth of a ton. The last data set was included in the main body of the report.

<sup>i</sup> Total Cost of Ownership includes: comprehensive, collision, bodily injury and property damage insurance; license, registration, taxes, depreciation, finance charge, gas, oil, maintenance, and tires.

## Calculations & Citations (Continued from Section 1)

### Reduction in the amount of CO<sub>2</sub> released into the atmosphere per TOD household per year

1-gallon gasoline yields.....	8.750 kg CO <sub>2</sub> <sup>16, i</sup>
TOTAL gallons of gasoline saved/household/year.....	256.5 to 384.8 (calc. in Section 1)
(256.5 gallons/household/year) * (8.750 kg CO <sub>2</sub> /gallon)	= 2,244 kg CO <sub>2</sub> /household/year
(384.8 gallons/household/year) * (8.750 kg CO <sub>2</sub> /gallon)	= 3,367 kg CO <sub>2</sub> /household/year
1 kg .....	2.205 lbs. <sup>17</sup>
(2.205 lbs./kg) * (2244 kg CO <sub>2</sub> /household/year savings)	= 4,948 lbs. CO <sub>2</sub> /household/year
(2.205 lbs./kg) * (3367 kg CO <sub>2</sub> /household/year savings)	= 7,424 lbs. CO <sub>2</sub> /household/year
Number of pounds in a ton (short).....	2,000 lbs./ton <sup>18</sup>
(4,948 lbs.) / (2,000 lbs./ton)	= <b>2.474 tons CO<sub>2</sub></b>
(7,424 lbs.) / (2,000 lbs./ton)	= <b>3.712 tons CO<sub>2</sub></b>

## V. Environmental Consequences of Global Climate Change

### Terms Defined<sup>ii</sup>

*Continental Glaciation:* Term used to describe the types of glaciers that are so huge that they cover substantially large parts of continents.

*Glacial Age:* A time in which the Earth has two well-defined polar ice caps that do not substantially disappear during summer months.

*Glacial Maximum:* Those instances within a glacial age in which continental glaciation is at a maximum. (That is; Continental glaciers cover the largest extent of high latitude continents for that particular glacial cycle)

*Glacial Minimum:* Those instances within a glacial age in which continental glaciation is at a minimum.

*Non-Glacial Age:* A time in which there are no well-defined polar ice caps that persist through the summer months.

### Past Climate Change

During the Earth's history there have been four major glacial ages interrupting the more common non-glacial ages. We are currently in a glacial minimum of a glacial or ice age. We know from arctic and antarctic ice core samples that there have been variations in CO<sub>2</sub> concentrations that have kept step with relatively warm glacial minimums and severely cold glacial maximums.<sup>iii</sup> CO<sub>2</sub> concentrations are higher

<sup>i</sup> Gasoline density = 2791grams/gallon

Percent of carbon by mass = 85.5%

Mass of CO<sub>2</sub> from 1 gallon of gas =

1 gallon gasoline × 2.791kg/gallon × 85.5% × (44.0g CO<sub>2</sub> / 12.0g C) = 8.750kg CO<sub>2</sub>

<sup>ii</sup> Popular terms, such as "ice age", are constantly misused and poorly understood by the public. For example: Most lay persons associate the term "ice age" with the last glacial maximum that ended about 15,000 years ago, when, by the definition used by most geologists, we are currently in an interglacial period within an ice age (using the old terminology). In order to avoid confusion the author has listed terms that are more meaningful and (most importantly) have stable definitions in the scientific community.

<sup>iii</sup> Carbon dioxide (CO<sub>2</sub>) is a heat trapping gas. Methane (CH<sub>4</sub>) also traps heat (albeit at a far greater efficiency), but it relatively quickly breaks down into CO<sub>2</sub>, water vapor (H<sub>2</sub>O) and heat in the atmosphere.

during glacial minimums and much lower during glacial maximums.<sup>19</sup> This relationship is significantly strong enough to prove a reinforcing if not causal relationship between CO<sub>2</sub> concentration and global climate change.<sup>20</sup>

### **Current Climate Change**

Gas trapped in ice core samples taken from the Arctic, along with data collected at Mauna Loa Observatory in Hawaii, have conclusively shown that a 30% increase of CO<sub>2</sub> concentration has occurred since pre-industrial times.<sup>21</sup> The rate of this increase is faster than at any time in the last 160,000 years.<sup>i, 22</sup> Scientists know that combustion of fossil fuels is the primary source of this increase in CO<sub>2</sub> concentration.<sup>23, ii</sup> There has been an unprecedented increase in average world temperatures of ½ to 1 degree Fahrenheit since 1900 along with an increase of 4 to 10 inches in average sea level.<sup>24</sup> These data, combined with the fact that CO<sub>2</sub> is a heat trapping gas, leads a great majority of climatologists to conclude that the increase in CO<sub>2</sub> concentration is at least a significant, if not substantial, contributor to global warming.

### **Future Climate Change**

In the next century CO<sub>2</sub> from the combustion of fossil fuels is projected to account for over half of the forecasted global warming. Much of the remaining increase in average world temperatures will be from livestock derived methane. In 1995 the United Nations Environmental Programme determined from the available body of evidence that the extent of future global warming will range from 1.8 to 6.3 degrees Fahrenheit with a corresponding increase in sea level of 4 to 37 inches (above 1995 levels).<sup>25, iii</sup>

### **Ecological Impacts**

The immediate effect of higher average temperatures and increased concentration of atmospheric CO<sub>2</sub> will be more vigorous growth of most plant life. However, the make-up of most plant communities will change as a direct result of the change in temperature and an indirect result of the change in CO<sub>2</sub> concentration.<sup>26, iv</sup>

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<sup>i</sup> Scientists cannot conclusively determine CO<sub>2</sub> concentration data earlier than 160,000 years ago because older ice cores have not been studied. Other methods of determining prehistoric CO<sub>2</sub> concentrations are available, but they are indirect and therefore less reliable sources of information. (Raynaud et al. "The ice record of greenhouse gases". *Science*, 1993)

<sup>ii</sup> Researchers have determined this from analyzing the different isotopes of carbon within atmospheric CO<sub>2</sub>, and comparing these results with the isotopes of carbon within fossil fuels. From this they have determined that there is an increasing amount of carbon within atmospheric CO<sub>2</sub> that bears the chemical signature of fossil fuel. Scientists have confirmed these results by comparing very old samples of atmosphere trapped in ice cores (of which we only have data for the last 160,000 years).

<sup>iii</sup> The lower figure assumes that current levels of fossil fuel combustion are held constant. The higher figure assumes that third world nations will eventually consume fossil fuels on a per capita rate similar to that in Europe and America (circa 1995). The projection period is to the year 2100.

<sup>iv</sup> A global warming of 1.8 to 6.3 degrees Fahrenheit will cause a poleward migration of forest types of 100 to 340 miles and an elevation migration of 500 to 1800 feet. The short

For example, the increase in temperature will rapidly push the habitat range of cold adapted plant communities higher up mountain ranges. This will result in a decrease in habitat area for these plant communities and the animals that depend upon them. Unfortunately, roads, highways and other human settlements will slow the migration of these plant communities. Extinction of plants and animals will inevitably result unless humans can aid the relocation of plant communities and the animals that depend upon them.<sup>27</sup>

If relocation efforts are not effective, then large portions of plant communities will have increased extinction rates. For example, the underlying dead plant material will decay and be susceptible to very intense fires that can destroy the ability of the soil to support plant life for an extended period of time. Even if the plant community escapes fire, it will be increasingly invaded by plant species that reproduce rapidly and do well in disturbed ecosystems (commonly called weeds). These disturbances will continue until plant communities that are better adapted to the new temperature regime are able to colonize the area.<sup>28, i</sup>

## VI. Economic Consequences of Global Climate Change

The 1990s was both the hottest decade on record and the most costly for the insurance industry. Following are excerpts from a speech given by Jeanne M. Fox, who is a regional administrator for the U.S. Environmental Protection Agency (at time of publication of this document). Fox was addressing members of the insurance industry attending a panel discussion on climate change on March 28, 2000.<sup>29</sup>

“Earlier this month, the National Climate Data center reported that for the third year in a row, the United States has set a record for winter warmth with the December 1999 to February 2000 winter just completed. According to data gathered last year by the Goddard Institute of Space Science, the 1990's were warmer than the 1980's -- the warmest decade on record -- by two-tenths of a degree. Last year was the fifth warmest year on record. This, despite the fact that *La Nina* had a cooling effect during the year....”

“Last year, the Environmental Defense Fund issued a report on the potential impact of global warming on the New York metropolitan region, which projected similar catastrophic possibilities. Among its findings:

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time period allowed for this migration combined with the barrier of human development will further stress already disrupted ecosystems.

<sup>i</sup> This is just one example of the ecological consequences of climate change. Others are; Sea level rise will destroy coastal wetlands by submerging them (migration of wetlands will be blocked by human development). Some areas will experience more rain, others will have less. This will further shift the placement of plant communities. In addition, the current desert belt will migrate northward in the Northern Hemisphere and southward in the Southern Hemisphere.

By the year 2100, in the best case scenario, New York will have as many 90-degree-plus days as Miami has today -- nearly double our current level. In the worst case scenario, 90-degree-days could increase by a magnitude of six....”

“In 1998, weather-related natural disasters produced significant human and economic losses. Hurricanes, storms, heat waves, floods and earthquakes worldwide claimed 50,000 lives and cost approximately \$93 billion. Insured losses accounted for \$15 billion of the total, the fourth highest annual figure ever. According to the Reinsurance Association of America, nearly 50% of the insured losses from natural catastrophes during the past forty years have been incurred since 1990.”

## Appendix to Chapter 4: Overview of TOD Activities in Major U.S. Transit Systems Outside California

Primary author of this section: GB Arrington, Parsons Brinckerhoff

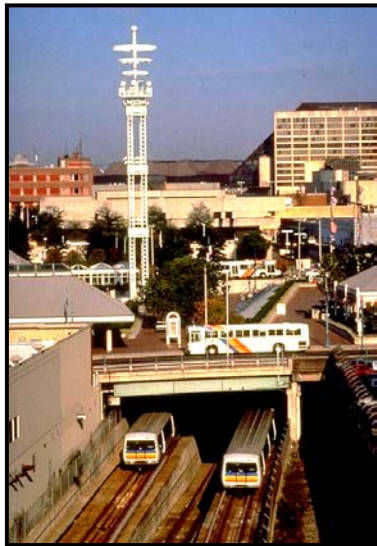
### Atlanta, Georgia

#### Description Of The Transit System

Atlanta's Metropolitan Area Rapid Transit Authority (MARTA) system incorporates north-south and east-west lines with 48 miles of double track and 38 stations, opened between 1979 and 2000. MARTA opened a new two-mile northern extension in December 2000 that added two new stations, Sandy Springs and North Springs.

#### Policy Framework For TOD

The Atlanta Regional Commission's (ARC) development plan includes a number of policy statements supporting rail station-area development. A section entitled "Transit Station Area Policies" encourages transit-related development around rail stations and intermodal facilities and includes policies that support improvements in areas "that present the best opportunities for development and redevelopment."<sup>30</sup>



Parsons Brinckerhoff

Acting on the Federal Transit Administration's 1997 directive on joint development, MARTA launched a bold TOD initiative in that same year. Following a thorough review of all real estate assets, the Authority developed a comprehensive inventory of transit properties. These sites were classified according to their development potential, with flexibility for properties to move between categories as market conditions and circumstances changed. Based upon this initial assessment, four properties were ranked at the top of the list: a 47 acre site at the Lindbergh Center Station, an 11 acre park-and-ride lot near Sandy Springs Station, a 16 acre tract at the Medical Center Station, and a small parcel near the North Springs Station in downtown Atlanta. With the help of an outside consulting firm, MARTA began to market the site

at the Lindbergh Center Station. This project became the flagship and model TOD for the Authority. The development of the four properties is described below under TOD Implementation.

While MARTA relies upon its own expertise to initially evaluate properties, it is the Authority's policy to encourage prospective developers to conduct market research and propose the best mix of uses on each specific site. As it offers properties for development, MARTA strives to be responsive and flexible in working with private developers and public development authorities to create new destinations and points of origin for transit riders throughout the greater Atlanta region.



Many TODs have been developed in Downtown and Midtown Atlanta, Decatur, and the Buckhead area as entirely private undertakings that do not involve publicly owned land. MARTA does not own significant tracts of developable land at all of its stations but there are opportunities for TOD projects on private holdings, and the Authority actively encourages the development of these sites as part of its overall TOD policy.

## Status Of TOD Implementation

**Lindbergh City Center:** MARTA's flagship TOD represents a mixed-use project consisting of office, retail and multifamily residential development on the 47 acres owned by the Authority around the station. MARTA recognized the potential of this property during the early days of TOD policy formation. Using a competitive bid process, the Authority selected a private real estate consulting firm to help market the Lindbergh property in August of 1997. This initial marketing effort started a three-year process involving the selection of a master developer, public hearings, zoning, negotiation of long term ground leases and contracts, court challenges, and many smaller challenges that determined the final makeup of the Lindbergh City Center.



Lindbergh City Center Master Plan,  
MARTA

A team headed by Carter & Associates was selected as the master developer. Their plan called for building a mini-city with a pedestrian-friendly Main Street as the public focal point. Street front shops and restaurants bridge over the existing transit station and extend into a multifamily residential area. During the time MARTA and its developer were introducing the project to area residents, one of Atlanta's largest corporate citizens recognized the potential of the Lindbergh development. BellSouth asked to become the anchor tenant in the office portion of the project. Their investment in the TOD represented part of an overall \$750 million relocation of corporate operations from scattered suburban offices to a concentration near central city transit. Other partners involved in the Lindbergh City Center include Post Properties, Harold A. Dawson Company, and Federal Realty Investment Trust. As a part of its role in this project, MARTA will invest significantly in the upgrading of infrastructure, including sewer improvements and station expansion. These upgrades will be financed through the Authority's bonding capacity.



Lindbergh City Center Cinema, MARTA

Currently, the scope of the Lindbergh City Center can be determined by the Phase I construction that is underway consisting of 1 million square feet of office space by

BellSouth. In addition, Federal Realty Investment Trust is poised to begin construction of 300,000 square feet of ground level retail along the TOD Main Street. Other construction phases involving residential and station area improvements will follow.

**Abernathy Road:** A joint development is also underway on an 11-acre MARTA-owned park-and-ride lot at the intersection of Abernathy Road and Georgia 400 in north Fulton County. This property became desirable as a TOD when the opening of the nearby Sandy Springs Station reduced the need for a park-and-ride facility. MARTA asked for proposals and, using a competitive bid process, selected Abernathy Development Partners (a joint venture of Ackerman & Company and H.J. Russell & Company). The proposed mixed-use project combined office, hotel and retail activities with residential condominiums. Local zoning and project plans have received approval and ground lease agreements are currently being negotiated. Final approval for this project is expected to go before the MARTA Board of Directors in January or February of 2001.

**Medical Center:** In June 1999, MARTA received proposals from two competing teams for development of a 16-acre parcel adjacent to the Medical Center Station. The team led by neighboring Saint Joseph's Hospital was selected to develop the property for medical office and residential. This site is unique because of its central location to an area called "pill hill" where three major hospitals are located and because it crosses county lines to include both Fulton and DeKalb. Zoning approval for medical offices in the Fulton County portion of the property has been secured, and negotiations are underway. Final approval for this project is expected to go before the MARTA Board of Directors in January or February of 2001.

**West Peachtree at 3<sup>rd</sup> Street:** BellSouth Corporation was selected for the joint development of a 1.3-acre site near the north entrance to the North Avenue Station. MARTA's parcel will be included in the larger assemblage of property that is being carried out by BellSouth as part of their MetroPlan for office restructuring.

#### **Other TOD Projects:**

MARTA has also been active in gaining support for the development of other TOD projects in cooperation with local development authorities. These include planned projects at Kensington, Chamblee, Ashby, Hamilton E. Holmes, College Park and Lakewood-Fort McPherson Stations.

#### **Highlights And Key Issues**

The consolidation of BellSouth into three new centers by 2003 will mean 80% of the company's employees in metro Atlanta will work near a MARTA rail station, compared to 30% today. To enhance access for its employees, BellSouth is building parking for its employees at four MARTA stations.

Investments in new construction and renovation within walking distance of MARTA Stations have risen from \$537.5 million in 1996 to \$850.8 million in 1999. Projects include residential, office, retail/commercial, mixed-use and public/institutional. MARTA's ability to shape development in Atlanta is severely limited by the fact that a majority of new growth in metropolitan Atlanta has occurred in counties outside of MARTA's service area.<sup>i</sup>

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<sup>i</sup> The primary contact and reviewer for the Atlanta profile was Lynda Penton [LPenton@itsmarta.com](mailto:LPenton@itsmarta.com)

## Baltimore, Maryland

### Description Of The Transit System

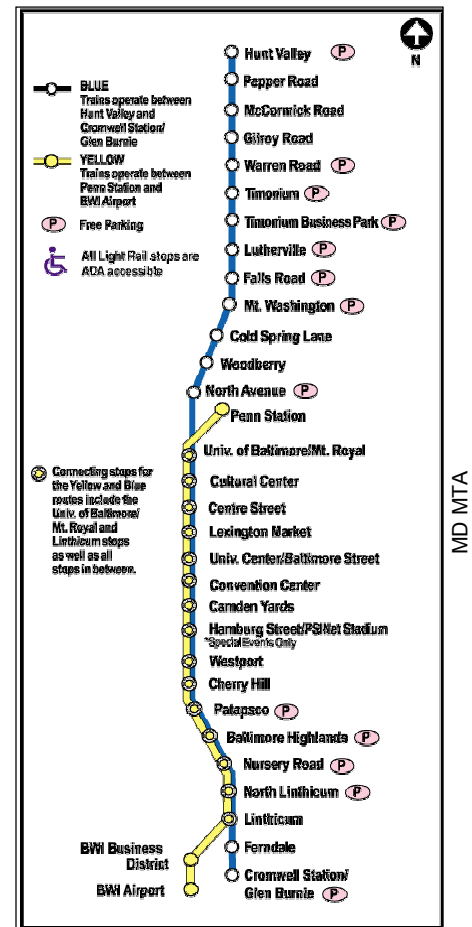
The Maryland Mass Transit Administration (MD MTA) operates light and heavy rail transit along with standard fixed-route bus services for the Baltimore metropolitan area, as well as operating the Maryland Rail Commuter (MARC) service for the entire state.

The Baltimore Metro [heavy rail] system opened in 1983, and presently consists of 14 stations along a single 14.5-mile line that extends from Owings Mills in the northwest to Johns Hopkins Hospital in east Baltimore. Its alignment is alternately subsurface, surface, and elevated, with most of the downtown operations underground. Average daily ridership is about 52,000. The newer Central Light Rail Line initially opened in 1992, and presently comprises a single 30-mile at-grade line with 32 stops. Outside the downtown, the stops become formal stations, while downtown they are generally stops along the street system. The system extends from Hunt Valley in the north to BWI Airport in the south, intersecting with the Metro system at only one location – Lexington Market in downtown Baltimore. Average daily ridership is about 30,000.

MD MTA also operates a 72-route bus system in Baltimore, and since 1992 has been responsible for operation of the MARC commuter rail system, which comprises 34 stations on 4 separate lines serving the Baltimore and Washington DC regions.

### Policy Framework For TOD

In September 2000 Governor Paris Glendening appointed a special Transit-oriented Development (TOD) Task Force chaired by the Secretary of Transportation. The task force was charged with identifying TOD benefits, identifying barriers to achieving TOD, and preparing recommendations to broaden the implementation of TOD in the state of Maryland. Smart Growth has been a major focus of Governor Glendening's administration. The task force concluded that TOD is one of the most important tools in the state's toolbox to help realize Maryland's Smart Growth agenda. At the same time, TOD has not been widely achieved in Maryland. To help realize the promise of TOD in Maryland the task force identified a series of barriers in the areas of planning and zoning, market and financial feasibility, institutional relationships, and public perceptions that need the attention of the state.



Baltimore LRT Line

Seventeen specific recommendations were prepared and forwarded to Governor Glendening to help achieve greater implementation of TOD in Maryland. The recommendations covered the following:

- ▶ Provide TOD financing options at the developer, local government, and household levels;
- ▶ Broaden the authority of the Maryland Department of Transportation by making TOD a transportation related purpose
- ▶ Combine State backing—in terms of resources and guarantees—with strong local partnerships so that TODs move forward in Maryland on broad-based support; and
- ▶ Establish ongoing oversight by creating a TOD Advisory Council that is focused on moving TOD forward in the State.<sup>31</sup>

MD MTA has no formal policy for TOD or joint development. Its “unofficial” policy acknowledges that its physical assets are underutilized and that if development around these assets is intensified and made pedestrian-friendly, increased ridership should result.

Its strategies to encourage joint development programs are to:

- (1) use MD MTA property as an incentive to development,
- (2) provide transportation improvements within the “TOD zone,” and
- (3) work through the local community planning and development agencies to identify opportunities and to provide the necessary zoning and/or density bonuses to accommodate the development.

MD MTA does not have a formal marketing process for TOD/joint development, other than the informal process described above. They have undertaken various studies, however, to assemble information on conditions and opportunities at transit station sites. These include transit station vicinity profiles for each station in the Baltimore and Washington systems (1995), parking facility profiles for each station (1997), and assessment of station access facilities or needs under ACCESS 2000 (1998). The station vicinity profiles are now being updated and enhanced to become development opportunity profiles, similar to Portland’s, to be used for marketing TOD opportunities.

### **Status Of TOD Implementation**

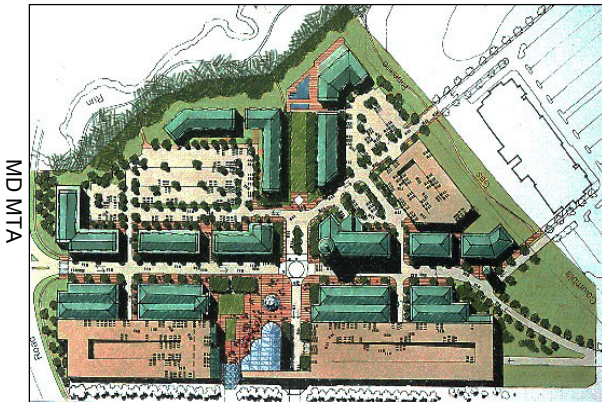
Charles Center Plaza was MD MTA’s first joint project. An air rights development at the Charles Street Metro station, it consists of a 250,000 square foot office development, with 25,000 square feet of retail space, and a plaza.

Current activity downtown includes development around the Johns Hopkins station site in order to support major medical center activity. The first Metro suburban joint development project was Reisterstown Plaza, consisting of a day care center and a 9,000 square foot police station. It was financed through a \$1.5 million Livable Communities grant matched with \$300,000 from the City of Baltimore. This site has recently been the focus of discussions to relocate district court facilities to the area.

The most significant suburban project is Owings Mills at the western terminus of the system. While the station was opened in 1987 and development of a town center was a prominent factor in the planning, progress has been slow. A 1990 site plan was prepared for high-



intensity, mixed-use on 37 acres of land acquired by MD MTA for parking at the station. Components of the site were to be linked by a people mover. MD MTA actively solicited developer interest in the site, but with no major proposals received. An existing regional mall and business park competed for growth at the site during a time when the Baltimore economy was flat, and the mall actually erected a fence between itself and the MD MTA station as a hedge against a perceived crime threat. The project is showing new life, and MD MTA is negotiating with a developer to locate on the property. The State has offered to pay \$13 million for parking garages, to provide improved pedestrian connections to the existing mall, and to study and attempt to relieve traffic access problems along Reisterstown Road. In support, the County has agreed to spend \$9.2 million to locate a satellite community college campus at the site, along with a public library branch.



**Owens Mill TOD Concept**

The light rail system has not seen as much joint development action, partly because it is newer, and partly because stations are not located in areas that are currently attracting growth.

The Symphony Centre project is located at 901 North Howard Street in Baltimore's cultural district. Plans are underway for a developer to construct two, three-story office buildings on the 6-acre MD MTA site. They will include 98,000 square feet of office with 24,000 square feet of ground floor retail. The site will also have a seven-story, 140-unit apartment building, and a six-story/650-space parking garage. The project is

significant in a number of ways. It provides an important second connection between the light rail and the Metro system. The site is a node for six bus routes. The development will result in 480 new jobs and complement ongoing west side revitalization efforts. With its proximity to the Meyerhoff Symphony Hall, it will result in round-the-clock activity at the site. Other projects are under development at Hunt Valley and Mt. Washington.

MARC system stations are also a focus for TOD initiatives, although it's not clear what MD MTA is doing to support the development beyond enhancement of station areas. Important examples are at Gaithersburg (Washington area), Laurel, and Odenton (Baltimore area). Among the most ambitious efforts are sites where local rail and commuter rail stations are being combined into transit centers, as is happening in downtown Silver Spring (DC), Greenbelt (DC), New Carrollton (DC), and Penn Station (Baltimore).

### Highlights And Key Issues

The combination of a city administration focused on other issues, a relatively weak regional organization, and a transit agency managed by the state has complicated leadership and coordination of TOD. State management and funding has allowed the transit agency to take a regional outlook but local governments appear to be unmotivated to promote station area development.<sup>32, i</sup>

<sup>i</sup> The primary contact and reviewer for this profile was Rich Kyzmyak [kuzmyak@mdot.state.md.us](mailto:kuzmyak@mdot.state.md.us)

## Chicago, Illinois

### Description Of The Transit System

Chicago's regional transit network combines operations of four agencies:

- ▶ The Chicago Transit Authority (CTA) operates heavy rail and bus facilities in Chicago and 38 suburban municipalities. There are seven primary rail lines totaling about 225 route miles and 143 rail stations, with 560,000 passengers on an average weekday. There are 134 bus routes with 960,000 passengers on an average weekday;
- ▶ The PACE suburban bus system with 3,600 miles of bus routes and 184 vanpools;
- ▶ The Metra commuter rail system that has 505 route miles and 228 stations on 11 lines carrying an average of 277,000 weekday passengers; and
- ▶ The Regional Transportation Authority that provides financial and planning oversight for the three operating systems.

### Policy Framework For TOD

Regional transportation policies are established by the Chicago Area Transportation Study (CATS), which acts as MPO for the region, and the policies are related to regional planning activities conducted by the Northeastern Illinois Planning Council (NIPC). Both of these agencies have adopted policies supporting transit-focused development. The *2010 Transportation System Development Plan Update* supports improvements to “increase transit use by encouraging intensive developments to locate within easy access to existing or planned mass transit service.” One of the goals of the regional transportation plan is to “encourage local governments to consider land use regulations and development strategies that support TOD and design.”<sup>33</sup>

The CTA has no specific policy regarding TOD, which it sees as the responsibility of the local jurisdictions. Stations have been in place for close to 100 years. With few exceptions, there is very little land for joint development. CTA often has to acquire land as part of its station rehabilitations.

The CTA defines its role as building development-oriented transit. When a station rehabilitation or reconstruction is proposed, the agency studies the community context, assesses the future development potential, and then designs the station to serve the anticipated growth. With the well-established street grid of Chicago, this usually means making sure those connections to bus service on the arterials work, that the station design minimizes security problems, that it fits into the neighborhood, and that the pedestrian environment is inviting. CTA worked with the City and the Regional Transportation Authority to prepare the *Guidelines for Transit-Supportive Development*, as part of a campaign to educate on ways to help transit make a difference in reducing traffic and congestion.



### **Status Of TOD Implementation**

CTA supports focused coordination in which agencies work together to ensure the most effective use of resources in a station area. This involves capital planning such as business development projects, streetlights and streetscape improvements for completion at the same time as the station reconstruction or renovation. The Authority participates in local jurisdiction meetings regarding development near stations. They are flexible regarding architectural themes and willing to modify designs to provide direct connections with proposed development adjacent to stations.

The Urban Land Institute (ULI) and the “Campaign for Sensible Growth” led by the Metropolitan Planning Council have been advocating broader implementation of TOD as a principle in the Chicago region.<sup>34</sup>

### **Highlights And Key Issues**

The Strategic Neighborhood Action Plan (SNAP) encourages the coordination of capital planning for communities.

TOD planning continues to be an area of debate in Chicago. Recent smart growth initiatives by the Chicago Chapter of ULI (the regional planning organization) and private sector groups hold promise of making progress.<sup>1</sup>

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<sup>i</sup> The primary contact and reviewer for the Chicago profile was Linda Fuller [Fuller@transitchicago.com](mailto:Fuller@transitchicago.com)

## Cleveland, Ohio

### Description Of The Transit System

The rail and bus systems of the Greater Cleveland Regional Transit Authority (GCRTA) serve an area of over 515 square miles and a population of 1.6 million in the City of Cleveland and 66 suburban jurisdictions. The GCRTA bus system has 102 routes that total 1,108 route miles. The rail transit system consists of three lines. The 19 mile Red Line, the heavy-rail component of the system, has 18 stations. The 13 miles of light rail Blue/Green Lines serve 29 stations.

All of these lines converge at the downtown Tower City station that, as a central bus interchange point, is the intermodal facility for the downtown area. The GCRTA is constructing a light rail extension. GCRTA plans call for construction that includes a busway, relocating five heavy-rail stations of the Red Line, extending other existing lines, adding lines, and reinstituting commuter rail service to northern Ohio communities.<sup>35</sup>



Parsons Brinckerhoff

Cleveland Waterfront Light Rail

### Policy Framework For TOD

The five-county long-range transportation plan adopted in 1989 by the Northeast Ohio Area-wide Coordinating Agency (the regional MPO) provides very general support for "an integrated transportation system which will effectively serve and enhance the present and future land use patterns and promote the best balance of land use and transportation development."

The GCRTA's 1993 *Transit 2010 Long Range Plan* promotes "the best balance of land use and transit development, including joint development and multiple-use areas" and recognizes the support given Transit Focused Development by local government policies. The citywide plans in Cleveland's *Civic Vision 2000* include policies to promote transit developments that stimulate economic development, provide access to major traffic generating facilities, and "encourage joint public/private development of transit stations and associated amenities."

GCRTA also adopted a policy statement in 1993 to guide joint development and station-area development activities.<sup>36</sup>

Although no policy changes have been made, GCRTA has initiated a new model of station area planning which they plan to use at all of their stations. The agency now works exclusively with neighborhood organizations to accommodate local development plans into the stations. Station design is only part of the partnership. They have been successful in gaining support and development from local partners.

### **Status Of TOD Implementation**

In 1988, the GCRTA initiated a major redevelopment project on a 17-acre site in downtown Cleveland. Called Tower City Center, the project redeveloped the historic rail station serving downtown and introduced a 360,000 square foot, multi-level shopping center, a new office building, and a first-class hotel. It renovated the existing Terminal Tower, transformed a former post office into a new office building, and rebuilt the rapid transit station access ways through the complex, the tracks, and the platforms below the complex. In addition, the Authority built a walkway connecting the transit station to the new Gateway Center stadium and arena through the complex. The \$388 million project has transformed Cleveland's downtown and attracted a 30 percent increase in rail transit ridership.

The GCRTA also prepared site assessments for two stations that have excess parking capacity and requested indications of developer interest in those sites. As a result, the Authority is:

- ▶ Acquiring additional property and completing negotiations with a developer to build a Head Start childcare center at the renovated Windemere station, using funds from an FTA Livable Communities grant;
- ▶ Negotiating to lease excess parking area at the Triskett Station to a developer who in turn will lease the space to the Greater Cleveland Council of Economic Opportunity for another childcare center;
- ▶ Planning to construct another enclosed passenger access way, probably with federal funding, linking the Tower City station to a new federal courthouse.<sup>37</sup>

GCRTA has had success at their W. 65<sup>th</sup> Street station where they are partnering with a local development corporation to include a plaza, a concession, and a post office or credit union near the station. A local church is also working on an elderly housing complex adjacent to the station.

In East Cleveland, GCRTA is partnering with a local daycare agency to include Headstart day care adjacent to a station. They are also working with a local public library and the county on another station plan.

The proposed Euclid Corridor Transportation Project is a cluster of projects intended to improve transit service along Cleveland's "Main Street." It includes the Euclid Corridor Bus Rapid Transit (BRT) line, construction of east side and west side transit centers, and renovation of three Red Line Rapid Transit Stations. The BRT line will connect the central business district with the University Circle area and major cultural, medical, and educational districts. Electric trolley buses will operate in the exclusive center median busway then transition to the curb before continuing to the neighboring City of East Cleveland.

The Northeast Ohio Commuter Rail Feasibility Study is underway to assess the viability of introducing commuter rail service in ten travel corridors within a nine county area. In the final round of Phase 1, from late 1998 to early 1999, the study team assessed the overall feasibility of commuter rail in the Northeast Ohio region and made recommendations for next steps toward implementation of commuter rail in any corridors where such service proves to be feasible and warranted. The boards of the three metropolitan planning organizations adopted these recommendations, and the Final Report for Phase 1 was completed in mid-1999. A second study phase is expected to include such topics as: additional ridership forecasting, identification of rolling stock fleet procurement options, engineering analyses of track connections and required capacity improvements, investigation of alternative station, parking and access locations, and implementation planning.

### Highlights And Key Issues

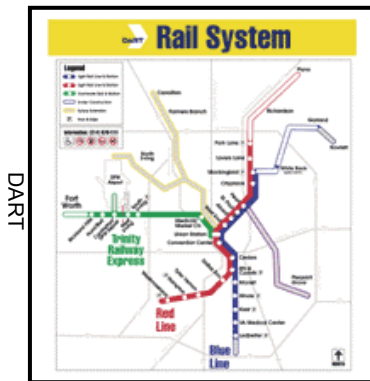
Instrumental in the rebuilding of the downtown terminal, as a major joint development was the driving force of Forest City Enterprises, a nationwide shopping-center development company headquartered in Cleveland. The developer was able to tap a variety of public and private resources to organize and finance the project. In addition, the GCRTA recognized the need to increase ridership and established both the policy basis and staffing to complete the project. With that positive experience, the Authority was stimulated to pursue other opportunities.<sup>38, i</sup>

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<sup>i</sup> The primary contact and reviewer for the Cleveland profile was Mary Beth Feke [MFeke@GCRTA.org](mailto:MFeke@GCRTA.org)

## Dallas, Texas

### Description Of The Transit System



The Dallas Area Rapid Transit (DART) operates bus, paratransit, light rail, commuter rail, and high occupancy vehicle lane services across a 13 city, 700 square mile area. In 1996, the 20 mile light rail system opened and there are another 24 miles under construction. The starter line has 20 stations and includes a downtown transitway mall and a 3.5-mile tunnel under the North Central Expressway. Daily ridership is over 38,000, and by 2010 DART projects an average of 185,000 passengers per day.

Voters approved a one- percent sales tax to provide funding for 52 miles of extensions to Carrollton, Las Colinas, and Pleasant Grove and light rail to Dallas-Fort Worth International Airport. As of February 2000, DART's Transit System Plan for service development during the next 15 years includes:

- ▶ 93 miles of light rail transit
- ▶ 22 miles of commuter rail transit
- ▶ 110 miles of High Occupancy Vehicle (HOV) lanes
- ▶ General Mobility Programs (Rideshare, Transportation Demand Management, Congestion Management, Intelligent Transportation and Local Assistance programs).

In August 2000, \$2.9 billion dollars in long-term bonds were approved for transit development through 2013. The bonds will make it possible for DART to accelerate construction of future rail lines by an average of four to five years—eight years to the airport -- as well as promoting the ongoing purchase of low emission buses and the construction of HOV lanes.

In September 2000, DART and the Fort Worth T extended the Trinity Railway Express commuter rail line into Tarrant County with four new stations including the airport. Next year, the Trinity Railway Express will be extended all the way to downtown Fort Worth.

The Cityplace subway station, 10 stories beneath North Central Expressway, opened in December 2000. The west entrance is flanked by several proposed developments as well as the nearly completed West Village residential, retail and entertainment district.

The twenty mile light rail starter system is being expanded 12 miles eastward to the Northwest Highway in fall 2001, to LBJ Freeway in spring 2002, and to downtown Garland in fall 2002. A second 12-mile extension to the north will serve Richardson in 2002 and Plano in 2003.



**Cedars Station TOD**



### Policy Framework For TOD

The regional planning agency that performs MPO functions for the Dallas area, the North Central Texas Council of Governments, has just adopted a policy in support of sustainable development.

*Mobility 2010: The Regional Transportation Plan for North Central Texas* contains only the most general references to linking land use with transportation. The city has adopted no incentives for development around DART stations.<sup>39</sup>

DART has adopted no specific policies supporting TOD. However, the agency's mission and goal statement refers to economic development and quality of life. DART is working with its member cities and the Council of Governments to determine ways to link its stations with pedestrian networks.

### Status Of TOD Implementation

Since the opening of the system in 1996, the *Dallas Morning News Reports* more than \$800 million in new commercial and residential investment within walking distance of the DART rail stations has either been constructed or is in process.<sup>40</sup>

**Cedars Station** encouraged the transformation of a long vacant structure one block away into 450 loft apartments with ground-floor retail space and a retail arcade running through the middle of the building along a former railroad tunnel. Commercial tenants, including two high tech companies and a law firm, will move in this year, and the total building is scheduled for completion by fall 2001. The new Dallas police headquarters is being built on land donated by the developer.<sup>41</sup>



**Mockingbird Station TOD**  
(under construction)

**Mockingbird Station** is linked by a pedestrian bridge over the DART line, to a high-density mixed-use development with 211 high-end loft apartments that have just been completed. The gardens, courtyard, restaurants and offices on the remainder of the site will open soon. The development company, UDC Urban, is developing the TOD on a 10-acre site of a former Western Electric Building.

**Cityplace Station** opened in December 2000, ten stories below ground. It brings together DART rail and bus service with the McKinney Avenue Trolley, an authentic electric-powered trolley line from the early 20<sup>th</sup> century. West Village, a mixed-use development one-quarter mile away, will be connected with the station via a tree-lined boulevard with a trolley line down the middle.

**Galatyn Park Station** will bring rail to the City of Richardson in summer 2002 and provide access to a forecasted 126,000 jobs in the "Telecom Corridor" by 2020. Station area development includes a nearly completed hotel and a performing arts center that is under construction. A mixed-use TOD is proposed for the remainder of the 12.5-acre site.



**Plano Transit Village** is a retail and residential complex that is being created in a public/private partnership. DART is working with the City of Plano and the developer to integrate the station design with the surrounding 19<sup>th</sup> century architecture. The station will open in summer 2003. The project will be completed in late 2001, and a second phase has just been announced.



### Highlights And Key Issues

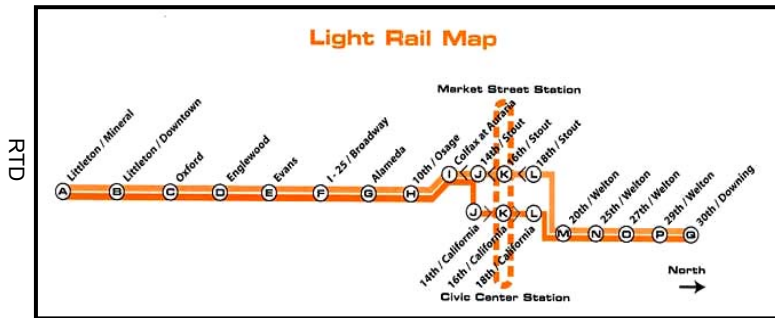
A study by a University of North Texas (UNT) economist, Dr. Bernard Weinstein,<sup>42</sup> shows that values of properties adjoining DART stations increased 25 percent more than similar properties not served by rail between 1996 and early 2000.<sup>43</sup> Another UNT study shows DART's current five year expansion is generating \$3.7 billion in economic activity and more than 32,000 jobs through 2003.

## Denver, Colorado

### Description Of The Transit System

Denver's first light rail line, the Central Corridor, began operations in 1994. The 5.3-mile line runs through Five Points Business District and the heart of downtown. It passes a center hosting three higher education institutions, the convention center, the Performing Arts Complex, and Denver Pavilions. With 15 stations, the line provides the spine of a

larger regional transit system. It is operated by the Rapid Transportation District (RTD), which constructed and operates the line entirely with local funds derived from a 0.6 percent addition to the local sales tax. Ridership has risen annually and in 1998 averaged 16,266 on weekdays.



In 1996, RTD received federal funds for the Southwest Corridor, a light rail (LRT) line between downtown Denver and the City of Littleton. The 8.7-mile line has five stations, four of which have park-and-ride lots. Since the line opened in July 2000, ridership has been 80% above projections, and RTD has gone to a four-car configuration to address the demand.

The Central Platte Valley Light Rail Spur is currently under construction. The project is innovatively financed with RTD, City of Denver and private contributions. The 1.6-mile line extends from the campus area with stops at Auraria Higher Education Center, Invesco Field at Mile High, the Pepsi Center, and Union Station. It will open for revenue service in 2002.

The Southeast Corridor has received full funding, including the local match for a federal grant. The 19-mile line includes 13 transit stations and will link the tech center with downtown. This is a joint project with Colorado Department of Transportation widening the highway and RTD constructing the light rail line, which is expected to open in 2007-2008.



Englewood TOD Master Plan

### Policy Framework For TOD

RTD hired a Transit-Oriented Development Specialist in June 2000. The position is responsible for working with other agencies, local jurisdictions and developers to encourage TOD.

Formal policies have been proposed and are currently being reviewed by the RTD Board for adoption in February 2001. One of the draft policies calls for working with local jurisdictions to create a master plan and a Request for Proposal prior to approaching potential developers. The City of Denver is increasing its efforts to guide TOD around stations. No special transit zoning is in place.

A “One Stop Shop” for developers is in the making that will provide the relevant information about stations planned for the Southeast Corridor. The purpose is to encourage TOD proposals.

For those communities that may be reluctant to accept TOD, RTD is offering to split the cost of a Master Plan that includes several concept descriptions, sketches and traffic information. The effort is one way to avoid under building a station area in response to neighborhood concerns. If the community remains unconvinced, RTD is willing to leave their current surface parking lot in place and wait.

### **Status Of TOD Implementation**

The City of Englewood TOD combines a transit hub with a civic and cultural center as well as office, retail uses, and entertainment on the site of “Cinderella City” a failed shopping mall. More than 500 residential units are planned, with a park and open space. The 55-acre site is located on a prime downtown corner. The City purchased the property, developed a master plan focused on light rail, and sold parcels to developers. RTD built the track and contributed to parking. Approximately half of the project has been constructed, and it is scheduled for completion in 2002.



Parsons Brinckerhoff

**Pedestrian bridge from Englewood Station to the TOD**

Littleton, a second ring suburban city, has a light rail station downtown. Affordable and senior housing, with first floor retail, and a community college are immediately adjacent.

The Southeast Corridor is a highway widening and rail project. Currently in the planning stage, it will have 13 stations. TOD proposals at the Broadway / Gates Rubber and the Colorado Center Stations are emerging. Several other sites are being master planned in 2001-2002.

A TOD analysis is currently underway to access the opportunity to create a new urban center in the City of Lakewood on the site of the Denver Federal Center. The project would use an Intermodal Transit Center along the proposed west corridor light rail line as an anchor tenant in the new TOD.

Central Corridor has three stations in the city planning process. The college proposed student housing near one, but the neighbors objected. They will initiate a joint planning process in 2001. At Five Points, the neighborhood asked for mixed-use and affordable housing. They are working with the city and urban renewal agency to put together a package.

In the past, local residents rejected two or three projects that were brought to RTD by developers. The current process of working with the community to create the plan and the RFP is intended to avoid past failures.



### Highlights And Key Issues

The Southeast Corridor will involve years of highway and rail construction. One major issue is how to deal with TOD in a design / build project. Change orders as the station plans emerge may require a contractual agreement to allow TOD development later in the process of construction.

#### 16<sup>th</sup> Street Bus Mall

Both the City of Denver and RTD have raised the profile of TOD within each organization. Like other communities, Denver's TOD approach is evolving as it gains more experience.

Denver's 16<sup>th</sup> Street Bus Mall has been a TOD success story.<sup>i</sup>

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<sup>i</sup> Primary contact and reviewer for the Denver profile was Marilee Utter [Marilee.Utter@RTD-Denver.com](mailto:Marilee.Utter@RTD-Denver.com)

## Miami, Florida

### Description Of The Transit System

The Miami-Dade Transit (MDT) operates a 21-mile heavy rail system in Miami and Dade County. Completed in 1984, it has 21 stations and weekday ridership averaged 45,400 in September 2000.

The downtown component of the system is a 4-mile automated “people mover” with 21 stations. It carries about 14,000 passengers on an average weekday.

### Policy Framework For TOD

Early in the system’s development, the Miami-Dade County Comprehensive Development Master Plan provided a general policy framework for transit-focused development (TFD) by calling for the creation of high-intensity activity centers linked to rapid transit facilities, including pursuit of joint development opportunities. In addition, the South Florida Regional Planning Council's *Strategic Regional Policy Plan for South Florida*, adopted in August 1995, recommends as a major strategy the integration of land use and transportation, including transit-oriented development, and urges development of “high-density and mixed land use around intermodal connections”.<sup>44</sup>



System map



Miami Metromover

The City of Miami also supports Transit-Focused Development. Policies incorporated in the Goals, Objectives, Policies volume of its *Comprehensive Neighborhood Plan 1989-2000*, adopted in 1989 and amended in 1991, include "high-density commercial and residential development and redevelopment in close proximity to Metrorail and Metromover stations" and "using the City's land development regulations to help direct development where it will support the densities required for urban rail transit systems".<sup>45</sup>

The MDT adopted a Station Area Design and Development Program in the late 1970s to guide private development adjacent to station areas. It also adopted joint-use policies in 1981 to encourage private development in conjunction with the Metrorail transit system, particularly on properties owned by the county as part of the transit system development. It has pursued joint development by evaluating opportunities and formulating strategies to implement such development, including marketing properties and negotiating mutually beneficial agreements.<sup>46</sup> Thus, regional agency and MPO plans and city and transit agency policies have combined to provide a strong framework that encourages transit-focused development.



## Status Of TOD Implementation

Development has occurred at several stations located in downtown and growing outer centers but not in most inner-city stations. MDT has negotiated a number of joint development and station interface projects. After the first project, which was initiated as the heavy rail system was being completed, a long decline in the local real estate market ensued. However, developer interest revived as indicated by the following list of projects.

**Dadeland South Metrorail Station:** The Datan Center is a privately owned development constructed on a Miami-Dade County owned, 6.5-acre site located adjacent to the Dadeland South Metrorail Station. The Center includes two class "A" office buildings totaling 472,000 square feet, 35,000 square feet of retail, a 305 luxury hotel and parking for 3,500 cars (1,000 of which are owned by MDT and dedicated for use by Metrorail riders). An additional 21,500 square feet of conference room facilities were recently completed. The project, which has been in operation for 12 years, provides more than \$900,000 annually in new revenue to the County. Three of the four phases included in the lease have been constructed. The fourth phase, consisting of an office building and a hotel, is under construction.



Miami Metrorail station

**Dadeland North Metrorail Station:** In 1994, the Board of County Commissioners approved the lease of a 9.2 acre site next to the Dadeland North Metrorail Station for the development of a three phase mixed-use project specially designed to include a transit plaza and 9,600 square feet of transit convenient retail. Phase I, which opened in 1996, consists of approximately 320,000 square feet of retail space housing five major retailers. A hotel is planned for Phase II and an office building for Phase III. Alternately, Phases II and/or III may be developed as residential units.

An additional "outparcel" phase of this project consisting of 48 apartments was completed in January 2000. Upon buildout, the project will total 650,000 square feet. The County, which receives both guaranteed minimum rent and approximately 5% of gross income from the project, will realize between \$40 and \$100 million dollars in new revenue over the term of the lease.

**South Miami Metrorail Station:** Subsequent to a competitive request for proposal process, MDT accepted proposals for the development of Hometown Station in December 1998. One proposal was received. It is for a mixed-use project utilizing the area surrounding the station and the space above the back part of the garage. A lease agreement with Hometown Station, LTD. has been completed, and the project will be implemented in four phases. Phase I, refurbishing the garage; Phase 2, development of a 98,000 square foot commercial/office building; Phase 3, development of 13,000 square feet of retail space; and Phase 4, development of 150,000 square feet of commercial space to be built over the rear garage.



**Martin Luther King, Jr. Metrorail Station:** In 1999, the Board approved an agreement with the Business Assistance Center to construct a mixed-use development that will include a class B type office building with 172,000 net rentable square feet of office space and 13,500 net rentable square feet of retail/support services space, as well as construction of a new parking garage. Construction of the project will begin in March 2001.

**Coconut Grove Metrorail Station:** In 2000, the Board leased property at the Coconut Grove Station for a development consisting of (1) a 19 story mixed-use transit center with 23,000 square feet of ground floor retail, a 611 space parking garage and 220 market rate residential units, (2) a 19 story office building with 11,000 square feet of ground floor retail, a 500 space parking garage and 157,500 square feet of office space, (3) and a one story 30,000 square foot supermarket with 201 surface parking spaces. An alternate for phase 3 involves a 200-room hotel in place of the market.



Miami Metrorail in downtown

**Santa Clara Metrorail Station:** Lease negotiations have been completed for a project consisting of an affordable housing project with 208 units, 200 residential parking spaces and 88 dedicated Metrorail parking spaces.

**Okeechobee Metrorail Station:** A proposal has been received for a mixed-use development including 300 affordable and market rate rental units, an 80 to 100 room hotel and 250,000 square foot urban entertainment center with multi-screen theaters, restaurants, game rooms and clothing retailers, to be built atop the existing parking garage.

**Brownsville Metrorail Station:** A proposal has been received for a 260 unit affordable rental-housing complex.

**Overtown Metrorail Station:** A proposal has been received for a transit-related project at the Overtown/Arena Station. The development will consist of 274,000 square feet of office space, 35,000 square feet of retail support space, a 567 space parking garage and an open plaza.

**Douglas Road Metrorail Station:** The site includes 9.29 acres of land and currently houses the Metrorail station and surface transit parking. Approximately 2.2 acres of the site will be leased for a 150,000 square foot office building to be occupied by the Miami-Dade County Water and Sewer Department and a 750 space parking garage for personnel only. A public plaza will connect the development to the station.

The state, county, and city are planning an intermodal center on a 140-acre site near the airport. It will link Amtrak and commuter rail lines, bus routes, and airport related traffic.<sup>47</sup>

The owners of the Omni retail/hotel development will fund a skybridge between the Omni Metromover station and the third level of the Moni Mall.<sup>48</sup>

### **Highlights And Key Issues**

South Florida's sprawling development is generally unsuitable for transit-focused development. However, the Miami system has managed to create significant access linkages between major development projects and a number of transit stations. The MDT pursued development opportunities from the beginning, but an economic downturn and social forces combined to depress development interest. Now, a more robust development market is stimulating a variety of station-area projects, especially at the Dadeland North and South stations near the Dadeland Mall, one of the largest in the nation. In addition, both stations are located in the special transit overlay zone established by Dade County. Thus, after a long lull in station-area development, it appears that a re-energized real estate market is allowing MDT to realize station-area development opportunities.<sup>49, i</sup>

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<sup>i</sup> The primary contact and reviewer for the Miami profile was Frank Talleda 305.375.1507

## Philadelphia, Pennsylvania

### Description Of The Transit System

The Southeastern Pennsylvania Transportation Authority (SEPTA) provides bus, light rail, heavy rail, and commuter rail services in the five county Southeastern Pennsylvania region. The area has a population of 3.8 million people with approximately 2 million employed.

SEPTA operates seven light rail lines, three heavy rail routes, 13 commuter rail routes, 5 trackless trolley routes, 110 bus routes and 56 school service routes providing over 1 million unlinked daily trips. The light rail routes total 51 miles in length, and the heavy rail routes are 37 miles long. A total inventory of 2,350 vehicles provides 17,100 daily revenue trips over 1,800 route miles.

### Policy Framework For TOD

The Delaware Valley Regional Planning Commission (DVRPC),<sup>i</sup> the MPO for the region, includes policies that are supportive of Transit Focused Development (TFD) in its regional transportation plan, *DVRPC Year 2020: Land Use and Transportation Plan*. However, the DVRPC's plan is only advisory for the 239 municipalities in Pennsylvania and 113



municipalities in New Jersey. Suburban county planning agencies have embraced station-area development in concept, but few municipalities have implemented it in plans and zoning. Many communities with stations are intolerant of further development around stations. Philadelphia's planning department is not actively promoting transit-focused development but is working with SEPTA to write a model-zoning ordinance for station areas.<sup>50</sup>

SEPTA has a long history of working with developers to construct transit-related development. The Gallery, an enclosed shopping mall in downtown Philadelphia that opened in 1977, is a well-known redevelopment project over a station serving two SEPTA lines. The project was a forerunner of many later downtown redevelopment efforts involving joint development throughout the nation. SEPTA routinely considers area enhancement when renovating stations and has regularly leased space within stations for private retail businesses. However, it does not actively promote joint development or station interfaces because of neighborhood opposition to past proposals, a lack of transit-owned developable parcels, a lack of market opportunities in many sectors of its system, and constraints on its authority to work with developers to package joint projects. However, SEPTA has been working with Delaware County and four municipalities to prepare a zoning overlay district for transit-oriented development.<sup>51</sup>

<sup>i</sup> Delaware Valley Regional Planning Commission, at: <http://www.dvrpc.org/>

### **Status Of TOD Implementation**

No station-related development activities are currently underway and none are planned. SEPTA is working with the cities of Chester and Philadelphia to promote FTA's Livable Communities Initiation at stations in those areas.<sup>52</sup>

Responding to rapid economic growth and the need for more comprehensive public transportation, SEPTA is set to expand and enhance transit services in Bucks County beginning in November, 2000. The major expansion of transit service will include introduction of new bus routes, service improvements, route realignments and enhanced bus route connections to railroad services. The development of this project offers SEPTA the opportunity to be an even more important link between area business centers, shopping centers, and residential locations in Bucks County and in Philadelphia.

The Delaware Valley Regional Planning Commission has preliminary station area planning work underway for 5 stations along the proposed Schuylkill Valley Metro line. The Pennsylvania Environmental Council has been active in pushing TOD as a growth management and revitalization strategy on behalf of the planning commission.

### **Highlights and Key Issues**

The Philadelphia story represents the common problem of regional agencies espousing TOD with little or no authority to implement action, while a multitude of local governments pay little attention to development opportunities. SEPTA's potential role as a stimulator of station-area development is apparently unrecognized and underused.<sup>53</sup> Leadership is now coming from DVRPC and the Pennsylvania Environmental Council.<sup>i</sup>

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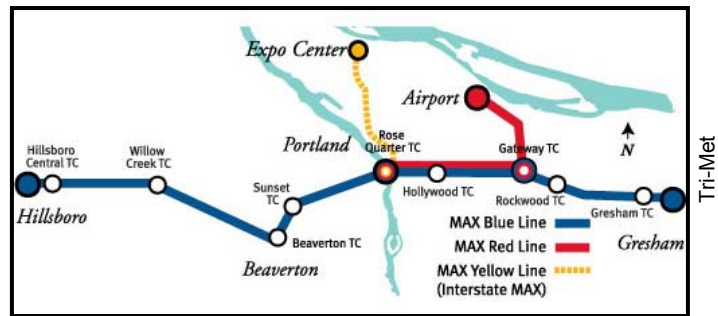
<sup>i</sup> The primary contact and reviewer for the Philadelphia profile was Tom Hickey [Hickey@pbworld.com](mailto:Hickey@pbworld.com)

## Portland, Oregon

### Description Of The Transit System

The Tri-County Metropolitan Transportation District (Tri-Met) covers 592 square miles of urbanized Clackamas, Multnomah, and Washington Counties. Originally created to operate the bus system, which now includes 102 routes, Tri-Met also operates a 33 mile MAX

(Metropolitan Area Express) light rail system.<sup>54</sup> The first segment, Eastside MAX, stretches 15 miles east from downtown Portland to Gresham and was completed in 1986. The second segment, Westside MAX, was built through long stretches of undeveloped land from Portland to Hillsboro and opened in 1998. The entire route has 50 stations. Ridership on bus and MAX is at historic highs. As of September 2001 Tri-Met ridership has been up 104 of 105 months. MAX reached a new record for 12-month average daily ridership of 71,200 boardings, and 84,000 average rides on weekends. Buses averaged 209,700 weekday boardings.<sup>55</sup>



Tri-Met began construction of the second line, Westside MAX, in 1992. The 18-mile line opened in 1998 with a total of 21 stations. Airport MAX started revenue service in September 2001. The 5.5 mile line was funded as part of an innovative funding package involving Bechtel Enterprises, The City of Portland, the Port of Portland and Tri-Met. Interstate MAX, a 5.6-mile, \$350 million extension from the Lloyd district to the EXPO Center, is under construction and scheduled to open in 2004. A 2.1-mile Central City Street Car also started operating in July 2001.

### Policy Framework For TOD

The Portland region has pursued an aggressive strategy of linking transportation and land use that is very supportive of TOD at a number of levels. The Region 2040 Growth Management Strategy adopted by the regional government, Metro, is built around transit. It features a tight Urban Growth Boundary, focusing growth in transit centers and corridors, and requiring local governments to adopt zoning and comprehensive plan changes to be consistent with the plan.

Legally binding station area plans were funded by Tri-Met and adopted by local governments before each MAX line opened for service. Prohibition of auto-oriented uses, minimum densities, parking maximums, and design requirements are features of the plans.



The Portland region uses a series of incentives to achieve more density, mix of uses, better design, and limited parking in TODs. The Oregon legislature enabled 10-year property tax abatement for TOD in 1995. Portland and Gresham currently use abatements. Portland has abated 7 projects with a combined value of \$79.6 million.<sup>56</sup> Metro operates a TOD Revolving fund capitalized with CMAQ funds.

### Status Of TOD Implementation

The pace of TOD implementation has accelerated in Portland as the community gains more familiarity with the approach. A number of large scale TODs are now under construction or completed along the East and Westside MAX line.



Parsons Brinckerhoff

Center Commons TOD

### *TODs along the east line:*

The **Gresham Civic Neighborhood** features a new MAX stop tied to the level of TOD on the site, retail, housing, and community uses on 190 acres. TOD zoning for the site was approved by the city in 1990.

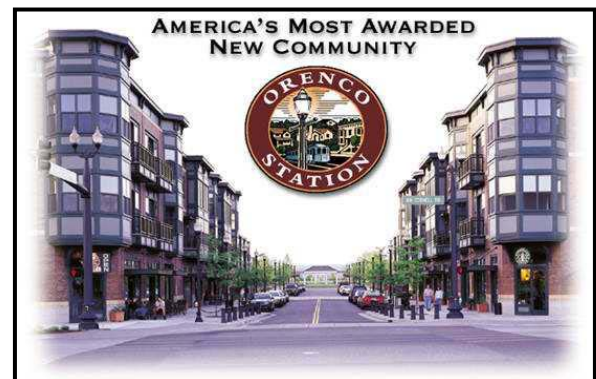
**Russellville Commons** Apartments at the 102nd station has 454 units on an 11-acre former school site.

**Center Commons** at the 60<sup>th</sup> station has 314 units of mixed-income for-sale and rental housing on a 4.9-acre former Department of Transportation maintenance site.

### The Westside line includes:

**Orenco Station**, a 190-acre TOD with a town center, will have 1,834 homes. The National Association of Homebuilders recently named Orenco Station the best master planned community in the United States.

**LaSalle Apartments** have 554 housing units on 23 acres with ground floor retail at the Beaverton Creek station. The densities here are the highest in Portland's western suburbs at 58 units per acre.



Pac Trust Fletcher Farr

The Town Center at Orenco Station includes vertical mixed uses and active community



**The Round at Beaverton Central** is a \$100 million mixed-use TOD. The Round has recently emerged from bankruptcy, demonstrating the difficulty of pushing the market and the need for sophisticated developers and local governments in developing TODs.<sup>57</sup>

The Airport MAX financing package is built around joint development. Bechtel Enterprises contributed \$28.2 million toward the \$125 million light rail project. In return, Bechtel, in partnership with Trammell Crow, will develop a 120-acre, transit-oriented development at the entrance to the airport. The balance of the funding comes from city of Portland urban renewal funds (\$23 million), Tri-Met general funds (\$45.5 million), and airport landing fees from the Port of Portland (\$28.3 million). Approximately 11,000 jobs and \$400 million worth of hospitality, entertainment, retail, and office space will be built at the site, called **CascadeStation**, when build out is completed in 2015.<sup>58</sup>

Interstate MAX includes a major TOD/urban infill element. Zoning for TOD was adopted well in advance of the project. Detailed studies are now underway to develop strategies for community-sensitive development. The project funding package includes \$30 million from urban renewal.

Parsons Brinckerhoff



**Central City Street Car leaving  
Portland State University**

The Central City Street Car was developed explicitly as a tool to leverage more inner city housing immediately north and south of Portland's downtown. Warehouse conversions and new loft construction along the line in the Pearl District are part of the hottest real estate market in the region. Densities were substantially raised as part of the decision to build the project.

The Portland Streetcar cost \$56.9 million to build. The major sources of funds included: \$28.5 million in bonds backed by city parking revenues, \$9.6 million from a one-time Local Improvement District paid by property owners, \$7.5 million from urban renewal, and \$5 million from Tri-Met.<sup>59</sup>

### Highlights And Key Issues

MAX provides easy access to thousands of central city and suburban jobs. The Westside line serves 24,000 high tech jobs. Intel gives all of its 11,500 employees an annual pass.

The light rail line is a catalyst for transit-oriented development. Since the decision to build, some \$2.4 billion worth of new development has occurred within walking distance to the MAX stations. The strongest development response to the light rail line came when:

- ▶ Developable land was consolidated under single ownership;
- ▶ Multiple public and private objectives were pursued;
- ▶ Implementation tools were in place and available; and
- ▶ Stations were well located in places with development potential.<sup>60</sup>

The impact of MAX has been felt from end to end of the line. Activity is greatest in the downtown, where light rail has played an important role in revitalizing the city center, and in the Lloyd District located just across the river.

Portland's innovative approach to integrating transportation and land use planning earned Westside MAX the First Place Award in the "Livable Communities Transit Competition" from the Federal Transit Administration in 1999.

Westside MAX has focused more than \$500 million in new development within an easy walk of the stations. The line has become a magnet for new transit-oriented communities. Projects range from mixed-use, residential/retail developments to suburban redevelopment projects to new communities rising from green fields.

New transit-friendly land use plans are in place around each station.<sup>i</sup>



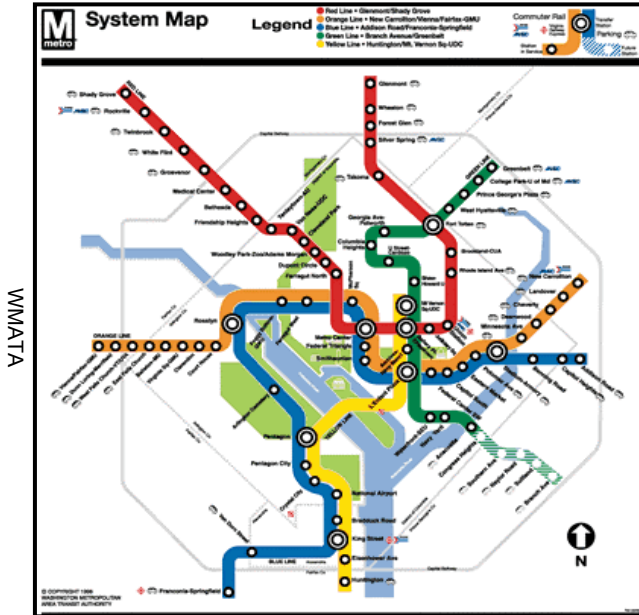
Parsons Brinckerhoff and the  
California Department of Transportation

**Pioneer Place, a Rouse Company Mall in downtown,  
Portland, has light rail at the front door**

<sup>i</sup> The primary contact for the Portland profile was GB Arrington (before joining Parsons Brinckerhoff Mr. Arrington was Director of Strategic and Long Range Planning for Tri-Met )

## Washington, D.C.

### Description Of The Transit System



The Washington Metropolitan Area Transit Authority (WMATA) is responsible for construction and operation of the 103-mile Metrorail system in the District of Columbia, northern Virginia, and Maryland. It also manages a regional bus system. WMATA is the second largest bus/transit system in the nation. In January 2001 the entire system as originally planned will be in operation, with 83 stations.

One new station is under construction at New York Avenue. Two extensions of existing lines are being planned: one to Tyson's Corner and Dulles Airport, the second to Largo, Maryland along the Blue Line. The rail system carries 600,000 passengers on an average weekday. It consists of four lines, designed to follow

existing or planned higher-density development corridors in the various jurisdictions. Many lines are routes along major road and highway corridors, although some follow railroad rights-of-way for all or part of their length. Stations were located at existing and future activity nodes. Much of the system in the District and close-in jurisdictions is underground.

### Policy Framework For TOD

Planning for TOD in the Washington metropolitan area has been somewhat uneven given the unique political setting with two states and the District of Columbia. The district, for example, has provided little leadership or TOD planning for the areas surrounding the 34 Metrorail stations within the District of Columbia. That is changing with the commencement in October 2001 of a special Mayoral Task Force on Transit-Oriented Development.

The task force is working to:

- ▶ Prepare a Vision Statement and definition of "Transit-Oriented Development" for the District of Columbia to guide both the Task Force and the Public,
- ▶ Identify TOD benefits for the District and neighborhoods,
- ▶ Identify financial, regulatory, and institutional obstacles to TOD, and
- ▶ Prepare a prioritized set of recommendations for maximizing TOD benefits for the District.<sup>61</sup>

WMATA has an active public/private Joint Development Program.<sup>62</sup> Through this program, the Authority seeks partners to develop WMATA-owned sites to complement transit station and related facility operations with the following goals:

- ▶ Attract new riders to the transit system by fostering commercial and residential projects adjacent to Metrorail stations.
- ▶ Create sources of revenue for WMATA to operate and maintain the transit system by expediently negotiating development agreements.
- ▶ Assist the viability of local jurisdictions to recapture a portion of their past financial contributions and continue making subsidy payments by expanding the local property tax base and adding value to local revenue sources.

Beginning in 1996, WMATA began issuing annual solicitations offering a large number of sites for lease or sale. The Authority has created marketing brochures and a web site, as well as holding developers conferences. The City bid on two sites that they will use to decentralize their offices and spur economic development in the neighborhoods. The Authority is currently negotiating on approximately 30 properties. Recognizing that developers must replace parking, the price of the land is written down. WMATA supports developers, rezoning applications to higher density designations, and allowing residential and commercial uses. Over the last five years, the Authority has worked with local jurisdictions to plan and zone sites for TOD.

### **Status Of TOD Implementation**

WMATA, has undertaken 54 development projects and connection agreements at a value of more than \$2 billion on land they own. These undertakings produce \$6-10 million annually in additional funds to the Metro system. The amount is forecast to grow to \$15 to 17 million annually by 2015. In the year 2000, WMATA realized a 50 percent price premium (over appraised value) on land sales. The premium in land sales to WMATA exceeds \$50 million.<sup>63</sup>

“Between 1980 and 1990, 40% of the region’s office and retail space was built within walking distance of a Metrorail Station. Since 1990, about 20% of office and retail space has been constructed within walking distance of a Metrorail station.

The Urban Land Institute estimated that Metrorail has generated \$15 billion in additional development – this number will grow to \$20 billion with the completion of the 103-mile system.

KPMG Peat Marwick estimated in a northern Virginia study that the Commonwealth of Virginia is receiving an annual rate of return of 19% on its investment in Metrorail through additional development attracted by Metrorail.”<sup>64</sup>

After 10 years of stop and start planning and citizen opposition, development is underway on recreating the “downtown” of *Silver Spring* on a 20-acre parcel purchased by the city. The station is planned within a 5-minute walk of the Metro Red line. The project includes 450,000 square feet of retail, 240,000 square feet of office, 255 Apartments, a hotel, and the “demalling” of City Place, a five-story retail mall built in the 1980s, by opening it up to the street.

**New York Avenue station**, expected to open in 2004, will be the first new addition to the original 103-mile Metrorail system. The project is bringing together partners working closely in



terms of financing, land use planning, design, and construction. This partnership, composed of the District of Columbia, the Federal Government, and private sector businesses, provides a unique opportunity to capture the potential for economic development in a long-neglected area.

Each of the partners will contribute approximately one-third of the cost of the project, which is estimated to total \$84 million. Major landowners in the station's vicinity requested that the Mayor pursue legislation to create a Special Assessment District in order to raise their share.

The Federal Government plans to build the new headquarters of the Bureau of Alcohol, Tobacco and Firearms at New York and Florida Avenues, bringing 1,100 employees into the service areas of the new station.

As part of the environmental study and to ensure that the station reflects the needs of the community, Metro is actively soliciting feedback from neighborhoods in the area. A series of meetings have been held with the community, surveys and brochures have been distributed, and a web site has been created.

### Highlights And Key Issues

Jurisdictions that Metrorail reached later in the construction schedule have shown less enthusiasm for promoting intensive station area development. This can be attributed in part to neighborhood backlash over the concept of intensive development around stations.

The region's local governments have rendered the current regional planning body, the Metropolitan

Washington Council of Governments (WashCOG)<sup>i</sup> powerless to prepare a regional plan built on the policy guidelines of the 1960s. In addition, the National Capitol Region Transportation Planning Board, the region's MPO, staffed by WashCOG, has no authority to encourage transit-focused development through project prioritization.<sup>65</sup>



Ballston Metro station

To capture the opportunity of Metrorail, local governments and WMATA need to turn more attention to creating transit-friendly communities in the areas surrounding stations.<sup>ii</sup>

<sup>i</sup> Metropolitan Washington Council of Governments: <http://www.mwcog.org/>

<sup>ii</sup> The primary contact and reviewer for the Washington profile was Rosalyn Doggett [rdoggett@wmata.com](mailto:rdoggett@wmata.com)



## Appendix I to Chapter 5: Detailed Profiles Of Twelve Sample TODs In California

**Primary Author of this Section: Topaz Faulkner  
(subconsultant to Parsons Brinckerhoff)**

Revised by Terry Parker with input from members  
of the study's Technical Advisory Committee

This section provides detailed information for twelve California transit-oriented developments, in addition to the summaries and photos that are presented in Chapter 5 of the "Statewide TOD Study Final Report".

Appendix II to Chapter 6 of this Technical Appendix (starting on page 140) also provides detailed information regarding the processes involved in creating five transit-oriented developments in California, four of which are also included in this section (plus one additional TOD – the Richmond Transit Village).

To obtain the following information, the study's consultants conducted telephone interviews between January and March 2001 to solicit data from persons knowledgeable about particular TODs (these are listed as contacts in the TOD profiles). In addition, site visits were made to the TODs to gather information and take photos. Documents and web sites were also reviewed in compiling these profiles, which are listed in the Bibliography, TOD Internet Sites, and Endnotes sections of this Technical Appendix.

Importantly, the information in this section describes conditions that were current as of Spring 2001. This information will change over time, particularly for TODs in planning or development; therefore, readers are encouraged to refer to the listed TOD contacts to obtain information on current conditions.



## **Sacramento Area:**

(Primary author of this TOD Profile: Daniel Mayer, Student Assistant,  
California Department of Transportation, Division of Mass Transportation)

### **Aspen Neighborhood, West Davis**

Service Frequency:	10-20 minutes (Unitrans)
Urban or Suburban location	Suburban
Ridership (station, not TOD):	Served by Unitrans several times per hour (in both directions) along Arlington Blvd. during the U.C. Davis school year. Served year-round by YoloBus morning and evening express bus service directly to Sacramento (two buses each morning; three at night). Both transit agencies indicated that the site is used intensively.
Jurisdiction:	City of Davis
Contact Name:	Community Development Department
Phone:	530.757.5610
Aspen Village Apts./Muir Commons	
Developer:	West Davis Associates
Contact name:	Debbie Roscoe
Phone:	530.753.7730
Heather Glen Apartments	
Developer:	'CHOC' - Community Housing Opportunities Corporation (non-profit affordable housing org.)
Contact name:	Cymalean Reese
Phone:	530.757.4440
Transit Agency:	Unitrans
Contact name:	Anthony Palmere
Phone:	530.754.5814
Transit Agency:	Yolo County Transit Agency ('YoloBus')
Contact name:	Lana Young
Phone:	530.666.2877 (switchboard)



## OVERVIEW

This neighborhood in Davis (a university-oriented city of 55,000 located near Sacramento) was not purposely built as a transit-oriented development; but it has evolved to function as one. It includes medium-density residential development near a sheltered transit stop at the corner of Arlington Blvd. and Shasta Drive in West Davis (west of Highway 113). This bus stop is easily accessible by wide tree-lined sidewalks, bike lanes, and by controlled pedestrian crossings.

Two medium-density apartment complexes are located across the street from the bus stop: the Heather Glen low- to moderate-income apartments, and Aspen Village (market-rate) apartments. In addition, the Muir Commons “co-housing” development is located a short walk up Shasta Drive. There are also a number of single-family homes (including pedestrian-friendly “Village Homes,” which is just south of the transit stop). An elementary and a middle school are also within a five-minute walk from this corner, and there is a small shopping center within a 15-minute walk.

In 1991, West Davis Associates, developers of the Aspen neighborhood, built the two-story “Aspen Village” apartments. Financing for this market-rate complex was from private sources. Aspen Village includes 88 units on 4.5 acres (at 20 dwelling units (du) per net acre density), with 230 parking spaces (2.6/unit).

Along the west side of Aspen Village Apartments is a scenic open space area, the West Davis Pond. It was created primarily as an overflow area for storm water. Due to its design, this large pond area also provides a haven for geese, shorebirds, egrets, muskrats, and other plants and animals.

Between the apartments and pond is a 12-foot wide pedestrian/bicycle path that is heavily used by neighborhood residents and visitors for both recreation and transportation.

In 1992, the Community Housing Opportunity Corporation (CHOC) built the affordable Heather Glen Apartments on land that the developer donated in partial compliance with the City’s “inclusionary affordable housing” ordinance. Affordable housing monies provided funding for Heather Glen. CHOC continues to manage this successful rent-controlled complex for low- and medium-income families. There has been no community concern or opposition to this attractive and well-maintained development.

Heather Glen’s two-story apartments are clustered around a central lawn and play area that is visible and well maintained. It is less than one block from the transit stop. The complex consists of 62 units on 3.5 acres (a net density of 17 dwelling units (du)/acre), with 124 parking spaces (2 spaces/unit).

The Muir Commons Co-Housing community is located further north on Shasta Drive, but still within a 5 to 6-minute walk from the transit stop. West Davis Associates built this innovative project in 1991 with significant design input from the purchasers. Financing



was through private banks. Muir Commons also contributed to the developers' compliance with the City's "inclusionary affordable housing" ordinance, since several of the buyers qualified as low- and moderate-income families. It is situated on 2.9 acres (9 du/acre net density), with 45 parking spaces (1.7/unit).

The community consists of: 26 self-contained townhomes with small front and back yards; a large community building with a commercial-size kitchen, dining room, children's play rooms, a meeting room, and laundry facilities; a lawn and children's play structure; bicycle storage facilities; a garage; a community garden; an orchard; a hot tub; and landscaped sitting areas. The layout of the site encourages community interaction and safe play for children.

The east portal to Muir Commons connects to a city greenbelt and bicycle/pedestrian path. This path is part of a citywide system that the City requires every new development to connect and contribute to.

### Interview Questions

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?* No

*Year project completed:* Aspen (1991), Heather Glen (1992), Muir Commons (1991)

*Was the TOD built before, during or after the station was built and transit became available?* Before. West Davis Associates was instrumental in the process of placing and funding of the transit stop. Limited transit service was available from Unitrans, but not previously at that location.

*Residential: total number of multi-family housing units:* Aspen Village (88), Heather Glen (62), Muir Commons (26) = 176 units (plus 30-40 single-family homes)

*Housing types & range of unit sizes:* Aspen (2 & 3 bedroom; 850-1200 sq. ft); Heather Glen (2 & 3 bedroom, 1100-1133 sq. ft); Muir Commons (800-1500 sq. ft)

*Affordable to median income households?* Heather Glen consists of 62 units of permanently affordable units, built and operated by CHOC.

*Retail and commercial space: total # sq. ft.* None  
*Office space: # sq. ft.* None

*What social services, if any, are available in the TOD?* Patwin Elementary School, and Emerson Junior High School.



*Location and type of parking?* Aspen Village (surrounding apartment buildings); Muir Commons (surrounding complex); Heather Glen (interior of complex)

*Number of spaces?* Aspen Village (230), Heather Glen (124), Muir Commons (45) = 399  
*Who constructed parking?* Aspen Village (W. Davis Associates), Heather Glen (CHOC): Muir Commons (W. Davis Associates).

*What is the standard parking ratio for the suburban area?* Aspen Village (2.6/unit), Heather Glen (2/unit), Muir Commons (1.7/unit)

*Were any local policies and/or programs in place to assist in implementation of the TOD?* The City of Davis has an 'inclusionary housing ordinance' that requires all new developments to include a minimum percentage of affordable housing units, or, alternatively, to provide land for constructing affordable housing. That is how the site was acquired for the Heather Glen affordable housing project.

In addition, the city requires all new development to provide pedestrian and bicycle facilities that meet minimum design standards, and to link them to existing paths in nearby areas to provide an interconnected, off-street bicycle and pedestrian pathway system.

*What problems were encountered in implementing the TOD?* No significant opposition occurred to the apartments and low-income housing project. There was some initial opposition to Muir Commons Co-Housing by adjacent single-family homeowners.

*How were these problems overcome?* Timing of the phases of development was critical: the multi-family housing projects (Aspen and Heather Glen) were built before the construction of single-family housing in the neighborhood. Thus, there were no immediate neighbors living in the neighborhood to oppose these projects until after they were already built. Another important factor is that the design and construction of Heather Glen affordable apartments is extremely high; and they are immaculately maintained. In fact, most residents of this neighborhood are not yet aware that this is an affordable housing project.

*Which Development Team Member took the lead?* West Davis Associates.

*Did the solution to the problems affect the design or implementation of the TOD?* No.

*What were the lessons learned?* Building higher-density portions of a development before the single-family houses are constructed eliminated potential neighborhood opposition (because there were no neighbors yet).

*Have barriers prevented other TODs from being developed?* No





*How was the project financed?* Standard private loans for Aspen Apartments and Muir Commons Co-Housing; affordable housing funds for Heather Glen (through CHOC).

*Were any public financing measures used to create/facilitate the TOD?* Affordable housing financing for Heather Glen (through CHOC and the City of Davis)

*In this TOD an increase in any of the following in relation to the standard land uses typical in that area?*

*Land use mix?* N/A (standard residential development)

*Density?* Medium-density development is more clustered than in other areas (although Davis has a higher percentage of multi-family housing than other cities of similar size in the central valley)

*Employment?* N/A

*Has the TOD:*

*Increased transit ridership?*

Yes. There was close to 'zero' ridership at this location before development and the installation of a bus stop. There was an immediate and dramatic increase in ridership following the installation of the bus stop.

*Improved transit service? – Have they increased bus service at this station?*

Yes. Unitrans has increased the number of routes serving the bus stop and therefore the frequency of service.

*Improved station aesthetic design?*

Yes. A bus shelter and two bike racks were built.

*Created a destination/attraction?*

No, except for the residents who live there.

*Has the TOD been successful in achieving these goals?* Yes.

*How is the project performing?* Well. All three projects are at full capacity. Vacancy rates are low in the market-rate apartment dwellings. Area property is increasing in value; this is known as a very desirable neighborhood. Resale values in the Muir Commons Co-Housing development are higher on a square-footage basis than many of the single-family houses in Aspen. Transit ridership continues to be high and is on the increase, with more students and commuters using the bus services as time goes by.

*Lessons Learned:* West Davis Associates has noticed that the demand for parking at its multi-family rental properties has risen during the past decade. They have, therefore, been lobbying the two transit agencies to site bus stops adjacent to their mid to high-density properties. This, in fact, is the origin of the transit stop at Arlington/Shasta. The developer has indicated that future developments will also include this feature.



## San Francisco Area:

### “EmeryStation”, Emeryville

Service Frequency:	Amtrak; 15 Roundtrips per day (the Capitol, San Joaquin, and Coast Starlight train service) Emery Go-Round    Peak: 10 to 15 minutes.    Non-peak: 20 to 30 minutes.
Ridership (station, not TOD)	Amtrak ; 33,700 per month (Capitol Corridor: 22,000 per month) Emery Go-Round; 2,400 daily passengers 1,000 to 3,000 on Saturdays
Development Team Members - Developer:	Wareham Development
Contact name:	Rich Robbins
Jurisdiction:	Emeryville
Contact name:	Ron Gerber, Economic Development
Phone / email:	510.596.4350 ext 1 / <a href="mailto:rgerber@ci.emeryville.ca.us">rgerber@ci.emeryville.ca.us</a>
Contact name:	Ignacio Dayrit, Project Manager
Phone / email:	510.596.4356 / <a href="mailto:idayrit@ci.emeryville.ca.us">idayrit@ci.emeryville.ca.us</a>
Transit Agency:	Amtrak Capitol Corridor
Contact name:	David Kutrosky
Phone:	510.464.6993
Contact name:	Amtrak Dennis Dang
Phone / email:	510.238.2606 / <a href="mailto:dangd@Amtrak.com">dangd@Amtrak.com</a>
Shuttle Transit:	Emery Go-Round
Contact name:	Wendy Silvani, Director
Phone:	510.465.0724

#### Overview

EmeryStation is a new 20-acre mixed-use transit-oriented development anchored by an Amtrak station in the city of Emeryville in the East Bay. The site is located on a former contaminated ‘brownfield’. Wareham Development and the City of Emeryville provided the leadership to implement the project that includes reuse of old industrial buildings and new construction.

The project was initiated by the City, which was interested in having a train station in Emeryville. Amtrak’s interest in an Emeryville station, combined with the leadership

of the Wareham Development Co., helped transform a contaminated site into a viable TOD. Amtrak offered to pay lease expenses for a new station, and the City negotiated the purchase of a three-acre site from Chevron and leased a quarter of it to Wareham to build a new rail station. The station opened in 1993, and in 1996 the City constructed a pedestrian bridge over the rail tracks to a nearby mixed-use retail center.

In 1998, construction began on 'EmeryStation Plaza', a three-building 550,000 square foot mixed-use complex on the north, east and south sides of the new Amtrak station. Between 10 to 15 percent of this development is ground floor mixed-use space, allowing retail, commercial or office uses as the market demands. In the first phase of the project, a 247,000 square foot, five-story office building was built that includes about 27,000 sq. ft. of ground-floor retail space and two levels of parking underneath. Phase II - EmeryStation North - added 170,000 sq. ft. in office space and was completed in 2001.

EmeryStation also includes 101 units of owner-occupied lofts and townhomes. Wareham also plans to build an additional 60 units of housing north of the office buildings.

### **Emery Go-Round**

The Emery Go-Round, a shuttle bus funded by local employers, connects the development with the MacArthur BART station some 2 miles away. The shuttle operates from 5:45 am to 9:30 pm on 15-minute headways. Wareham properties and their tenants pay for the service, with about 5% of the budget provided by the City. The City now requires new projects to help support operation of the shuttle as a condition for development approval.

### **Parking**

Most of the buildings are parked at 3 spaces per 1,000 square feet, reflecting the suburban parking standards in the City's code. Residential parking is 1 space per bedroom. Wareham believes parking could be reduced by 10% without impacting the project.

Wareham's strategy was to strengthen multiple modes of transit to help the project's viability. Approximately two-thirds of EmeryStation's tenants originally came from San Francisco, and the project now draws tenants from throughout the Bay Area.

### **Lessons Learned**

- EmeryStation is an example of how a developer with a long-term view and a small city can partner and create a significant TOD.
- Development is not moving according to the approved "master plan." Rather, Wareham has taken a fluid approach to address market demands.
- All the sites had brownfield issues. Wareham's extensive experience in working with regulatory agencies on remediation and their ability to obtain loans and grant funds through the City was critical in making the project happen.

## Interview Questions

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

### *Size of site:*

The area around the Amtrak station is approximately 20 acres.

### *Who initiated the project?*

Rich Robbins of Wareham Development Co. had a vision for the site. The project was initiated by Amtrak (Capitol Corridor), which was interested in having a facility in Emeryville. However, it was the City of Emeryville's involvement that made the project possible.

The Amtrak Capitol Corridor wanted to site a station in Emeryville because it offers the best connection to San Francisco (by bus across the Bay Bridge). Several potential locations were identified. For the first time, Amtrak offered to pay lease expenses for a station and this made it possible for the City to become involved. Since Amtrak will only work with public agencies, the City negotiated the purchase of the three-acre Chevron site and leased about a quarter of it to Wareham Development to build the station.

In 1993, the Amtrak station opened. The station is the point of arrival for San Francisco and is referred to by Amtrak as the "continental terminus" of their operations.

In 1996, the City completed construction of a pedestrian bridge over the rail tracks. The bridge and a free shuttle service (Emery Go-Round) link Emeryville's busiest business, retail and entertainment centers. Major employers and developers fund the shuttle, with about 5% of the budget provided by the City. The route that begins and ends at the MacArthur BART station is at capacity. Another shuttle route that focuses on the Amtrak station is being considered. A survey of employees being done by the Emery Go-Round Director indicates that a significant percentage of employees live along the Amtrak Capitol Corridor, which she believes offers a tremendous potential for increasing ridership. With sufficient funding, the shuttle could meet every Amtrak train and take people to their destinations in Emeryville.

In 1998, Phase I construction began on the EmeryStation Plaza (a three-building, 550,000 square foot mixed-use complex on the north, east, and south sides of the Amtrak station). The first phase of the project is a 240,000 square foot, five-story office building with ground floor retail and two levels of parking below. The site is a former Westinghouse facility that had been vacant for over 20 years. Portions of the site had toxic contamination problems. The City coordinated with Westinghouse, Wareham and regulatory agencies to do a risk-based assessment and facilitate redevelopment of the site.



In consideration of the infrastructure improvements and community amenities that Wareham is contributing, the City conveyed two acres of the Chevron site to the company for construction of a parking structure and assigned the parking air rights to Wareham with the understanding that affordable housing will be constructed. EmeryStation North (Phase II) was completed in 2001 and was followed in 2002 by the completion of phase III (101 units of housing).

Development is not moving according to a “master plan.” Rather, it is fluid and allows the developer to address market demands. For example, the EmeryStation first phase was originally envisioned to be row housing.

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

The City’s involvement in the negotiations with Amtrak, and on-going work with the California Environmental Protection Agency (EPA) accelerated the construction of the station and made it possible to build the residential units surrounding the TOD. The City worked with the EPA and other state regulatory agencies on the ‘Brownfields Pilot’, which helped assess the regional groundwater situation and the risk-based approach to cleanup. On site-specific issues, the City facilitated regulation with the Regional Water Quality Control Board and the Alameda County Department of Environmental Health.

*Residential:*

Approximately 100 units of owner-occupied lofts and town homes, plus a senior housing project, have been constructed. Permits have been issued for 100 units of rental apartments to be built next to the Amtrak station. Between 20% and 40% of the housing is affordable, depending upon the specific project.

*Retail/office/commercial space:*

10% to 15% of the new development is ground floor mixed-use allowing retail, commercial or office uses as the market demands.

*Location and type of parking?*

Structured parking was built under the new mixed-use and residential developments.

*Who constructed parking? Wareham*

*What is the standard parking ratio for the area?*

Retail/office/commercial: 3 spaces per 1000 square feet

Residential: 1 space for 1 bedroom; 1.5 spaces for live/work and for 2+ bedroom units; plus 0.25 spaces per unit for visitors

*Does the jurisdiction have a separate parking requirement for TODs? No*



*If there is no separate ratio, how is TOD parking addressed?*

Negotiated on a case-by-case basis.

*Are any creative parking strategies being tried?*

Valet parking is available. The Emery Go-Round shuttle also reduces the need for parking.

*Experience: Is there evidence of too much or too little parking being provided?*

There is not enough parking at this time. However, a new parking structure is being planned that will address the need by providing spaces to serve train patrons, shoppers, employees and residents.

*Were any City policies and/or programs in place to assist in implementation of the TOD?*

Mixed-use zoning was put in place to provide for a variety of uses, and the City allowed density bonuses when necessary to make the proposed project work out financially.

*What problems were encountered in implementing the TOD?*

The entire area is a Brownfield site. In addition to ground water pollution, there are concerns about air pollution.

*How were these problems overcome?*

The City worked on the Brownfield Pilot with a Technical Advisory Team that included the California EPA and State regulators, as well as a Task Force of stakeholders. The Brownfield Pilot was funded by a grant from the EPA, and Emeryville developed a citywide Groundwater Management Program using a risk-based process developed by the California EPA's San Francisco Bay Regional Water Quality Control Board. The program speeds redevelopment by addressing contamination issues regionally and cooperatively. It includes an internet-based Geographic Information System database, called One-Stop-Shop which provides easily accessed information on properties in the city. Using this system, developers, property owners and residents can access environmental information on any parcel via a web site.

The City maintained a close working relationship with EPA that allowed them to address problems with the development as they arose. By assisting in the regulatory process, the City reduces the developer's potential anxiety and at the same time aids the EPA in achieving their goals.

The City worked mainly with the Regional Water Quality Control Board and Alameda County on EmeryStation.

*Which Development Team Member took the lead?*

It was a joint effort.



*Did the solution to the problems affect the design or implementation of the TOD?*  
The solution arrived at through team effort is what made the TOD possible.

*How was the project financed?*

The City assisted with infrastructure costs, and the remainder is privately funded.

*Were any public financing measures used to create/facilitate the TOD?*

The City provided a loan to assist the developer with infrastructure costs.

*To what extent does the TOD provide community services?*

Other than the services provided by Amtrak and the shuttle, there are no community services incorporated into the TOD.

*Has the TOD increased any of the following?*

*Land use mix?* Yes, the area was previously industrial and is now mixed-use.

*Density?* Yes, most of the site was vacant for many years.

*Employment?* Phase I: 1,270 new jobs; Phase II: projected at 900 additional new jobs.

*Has the TOD:*

*Increased ridership?* Yes. There are now more than 3,000 employees working within a few blocks of the Amtrak station.

*Improved transit service?* Yes. The presence of the Amtrak station improved service.

*Improved station aesthetic design?* Yes.

*Created a destination/attraction?* Yes.

*Has the TOD been successful in achieving these goals? How is the project performing?*

Yes. The retail/commercial/office portion is fully leased-up.

*What were the Lessons Learned? What would you do differently?*

Would have liked to develop a Regional Parking Program.

#### QUESTIONS ABOUT TODs IN GENERAL

*What is stimulating developer interest in TODs?*

In the case of Emeryville, it is the vision of Rich Robbins.

*What are the barriers to TOD?*

The perceptions of neighbors that increased density and traffic are negative. There is also a perception that higher densities are linked to crime.

*What kinds of information would be useful to reduce barriers to TOD development?*

Information to refute false perceptions; crime statistics per capita, for example.

Information regarding the lower demand for resources that are associated with TOD versus suburban developments.

*What development incentives or circumstances are most helpful?*

City support with parcel assembly and regulatory agencies.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Provide increased funding to help developers provide community services such as schools and day care.

*Are there other public sector actions that could be taken to encourage TODs?*

Regional planning for TOD should be encouraged.

The state should target funds to support TOD.

## Fruitvale Transit Village, Oakland

Service Frequency:	3 lines at 15 minute headways each, with a net effect of a train every 5 minutes
Urban or Suburban location:	Urban
Ridership (station, not TOD):	7,527 weekday exits
Developer:	Fruitvale Development Corp.(FDC)
Contact name:	Manny Silva, Project Executive
Phone / email:	510.535.6907 / <a href="mailto:msilva@unitycouncil.org">msilva@unitycouncil.org</a>
Contact name:	Janet Johnson, Executive Assistant
Phone / email:	510.535.6908 / <a href="mailto:Jjohnson@unitycouncil.org">Jjohnson@unitycouncil.org</a>
Contact name:	Evelyn Johnson, Project Manager
Phone:	510.535.6911
Jurisdiction:	Oakland
Contact name:	Brian Matsumura, Planner
Phone / email:	510.238.3882 / <a href="mailto:BPM@oaklandnet.com">BPM@oaklandnet.com</a>
Contact name:	Claudia Cappio, Major Projects Planner
Phone / email:	510.238.2229
Transit Agency:	Bay Area Rapid Transit (BART)
Contact name:	Patty Hirota Cohen
Phone / email:	510.464.7581 / <a href="mailto:phirot@bart.gov">phirot@bart.gov</a>
Contact name:	Jeff Ordway
Phone / email:	510.464.6114 / <a href="mailto:jordway@bart.gov">jordway@bart.gov</a>

### Overview

The Fruitvale Transit Village involves the redevelopment of 5.3 acres of BART surface parking into housing and a community center. The Unity Council (formerly the Spanish Speaking Unity Council), created the Fruitvale Development Corporation (FDC) for the purpose of developing this mixed-use, public/private project.

The project was conceived as part of a neighborhood alternative to BART's construction of a parking structure at the station. BART relinquished its plan and agreed to work with the Unity Council to pursue a different type of development. The core of the transit village will cover five acres, including a 99-year ground lease of BART's property.



The plan for Fruitvale Transit Village includes: 337 units of housing; 25,000 sq. ft. of office space; 25,000 sq. ft. of retail/commercial space; a library; and a 40,000 sq. ft. health clinic. The project is being completed in phases. In the initial phase (completed in 1998), sewer and water lines were installed, 67 units of affordable senior housing were built, and trees were planted.

Groundbreaking for the second phase occurred early in 2002, for a new parking structure on a 300-space surface BART parking lot. These surface spaces will also be replaced by new parking at nearby locations, resulting in a net increase of 415 parking spaces. Construction of the proposed new project at the BART station itself will begin soon.

### **Project Funding and Parking**

The Fruitvale Transit Village (FTV) received the Federal Transit Administration's first Livable Communities grant. Ultimately, more than 20 sources of funds have been combined to raise the total amount needed. Most of these are public funds, with \$20 million in private investments.

Each funding source has its own set of requirements, some of which are conflicting. It took significant time and effort to negotiate a set of acceptable requirements for each element of the project and to make the various timelines mesh.

\$7.6 million in grant funds for the parking structure were raised by the FDC and will be considered credit on the ground lease with BART. Additional funding will be necessary to complete the structure, and the FDC has agreed to assist BART in raising it. Parking for the TOD will be built by the FDC. Parking is a key element -- the lead agency for the environmental assessment required it, and without replacement parking, it would be more difficult for BART to transfer land for the project.

### **Lessons Learned**

According to project staff, the Fruitvale Transit Village represents the first time an inner city neighborhood has succeeded in obtaining so called "environmental justice."

The Transit Village demonstrates the power of a community to attract grant funds and to develop solutions that meet its unique needs, based on a community process. The project also demonstrates the difficulties in such a mixed-use project.

- ▶ Implementation of the Transit Village has been hampered by the complexity of the project and the enormity of the vision. This has been a weakness holding back major progress on the project.
- ▶ The Unity Council risks becoming a victim of its own success as improvements drive up property values and increase taxes. FDC's response has been to initiate a Homeownership Program that involves buying, rehabbing, and selling homes at affordable prices to stabilize the community.





## Interview Questions

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

The Unity Council, which later formed the Fruitvale Development Corporation (FDC) for the purpose of developing the mixed-use, public/private project.

*Size of site:*

The central core of the transit village will cover 5 acres. Ancillary developments involve another 10 to 20 acres. BART's 10.43-acre surface parking lots are included.

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

The City of Oakland donated the vacated East 12<sup>th</sup> Street right-of-way, in return for which FDC paid \$1.5 million to realign and improve the street.

BART allowed a 99-year ground lease of its property. The remaining land, including a portion purchased from Union Pacific Railroad, was assembled by FDC using grant funds. The land owned by FDC and a portion of the land leased from BART will become the Fruitvale Transit Village.

*Year project completed:*

Initial work was completed in 1998: This phase involved installing sewer and water infrastructure, narrowing 12th street, building senior housing, and planting trees. During this period, FDC also used small grants to fund a façade improvement and building renovation program along the business corridor, including new paint, signs and awnings. The next phase of the Fruitvale Transit Village broke ground in March 2002.

*Was the TOD built before, during or after the station was built and transit became available?* After. The project was originally conceived as part of a neighborhood proposed alternative to the construction of a parking structure to add parking at the existing Fruitvale BART station. BART abandoned its original plan and agreed to work with the Unity Council and the neighborhood to pursue a different type of development.

*Residential: total number of housing units:* Phase 1 – 337 (67 units of which are senior housing)

*Housing types & range of unit sizes:* 1 bedroom

*Affordable to median income households?* Yes. Future housing will be a mix of market rate and affordable units.

*Retail and commercial space:* The plan includes 25,000 sq. ft. of retail/commercial space. Phase 1 included facade improvements and renovation of more than 100 properties along the Fruitvale commercial corridor.

*Parking location, type and number of spaces:*

As a result of the TOD, the following changes to parking will occur:

- ▶ 30 surface spaces added to BART surface lot by narrowing East 12<sup>th</sup> Street
- ▶ 170 surface spaces added on the Union Pacific property (immediately west)
- ▶ 345 structured spaces on UP property (i.e., net of those lost under garage) in a garage (immediately west and north of UP surface spaces)
- ▶ 170 surface spaces added through acquisition of property across Fruitvale Avenue from the FTV (known as the Caltrans lot)
- ▶ (300) surface spaces lost to enable FTV to be built
- ▶ 415 net increase in parking at the station.

Since the TOD will be built on property currently used for parking, 300 surface parking spaces will be lost. However, the changes listed above will result in a net increase of 415 parking spaces at the station.

*Who constructed the parking?*

BART is constructing replacement parking for transit patrons in a parking structure near the station. \$7.6 million in grant funds for the construction were raised by FDC and will be considered credit on the ground lease. Additional funding will be necessary to complete the structure and the FDC has agreed to assist BART in raising the money.

Parking for the TOD uses will be built by FDC. Parking is a key element in the project since the City's environmental approvals required it.

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?* No

*Experience: Is there evidence of too much or too little parking being provided?* Project is not complete yet – too soon to tell.

*What problems were encountered in implementing the TOD?*

- Each funding source has its own set of requirements, some of which are conflicting. It took significant time and effort to negotiate a set of

acceptable requirements for each element of the project. The projects funding is very complex with over 20 separate sources of funds.

- Making the timelines mesh was very difficult, as each of the partners in the project had their own expectations and schedules.
- When the project was originally approved, the BART Board of Directors authorized a Memorandum of Understanding (MOU) with the Unity Council to pass through federal money formally received by BART for both a pedestrian plaza and childcare center. Arabella Martinez, CEO of the Unity Council, secured funds for both projects. Unfortunately, the garage/surface parking funds were secured through the City of Oakland from the Federal Highway Administration (FHWA). Given FHWA's policy of not restricting use of parking built with their funds (i.e., BART could not limit parking to BART riders only), the Unity Council was given a choice of either having FHWA waive their restriction or shifting federal administration of the funds from FHWA to FTA. In shifting to FTA, however, Oakland would no longer be an eligible recipient, and the funds would have to go to BART. They chose the latter. BART has since stipulated that since BART was receiving the funds for the "stand alone" parking, BART must comply with Public Contract Code and design and build the spaces following BART's competitive bid process. So BART is now responsible for building the garage. The design of the TOD has not been impacted by this action.

*How were these problems overcome?*

All of the partners want the project to be a success and they work to achieve that goal.

*How was the project financed? Were any public financing measures used?*

More than 20 sources of funds were combined to acquire the total amount needed. Most of these are public funds, with \$20 million in private investments.

*To what extent does the TOD provide community services?*

Fruitvale Development Corporation is part of a community-based organization with direct knowledge of the neighborhood needs. The project has brought together an extensive public-private partnership with participation from BART, the City of Oakland, and a broad spectrum of neighborhood residents, merchants, and community organizations. The design includes community services such as La Clinica de La Raza Health Center, Cesar Chavez Public Library, a childcare center, a senior center, and a pedestrian plaza.

*Will the TOD increase any of the following?*

*Land use mix? Yes*

*Density? Yes*

*Employment? Yes*



*Will the TOD:*

*Increase ridership?* Yes, the TOD will result in increased transit usage by residents, visitors, employees, and will increase transit-parking capacity.

*Improve transit service?* The TOD won't impact the provision of transit service.

*Improve station aesthetic design?* Yes

*What were the Lessons Learned?*

- ▶ The power of the community to develop solutions that meet its needs should be tapped into. Fruitvale Transit Village design is based on a community process. The Unity Council, being a community-based organization rather than a government agency, is better able to identify projects that will meet the needs of the neighborhood.
- ▶ This process has brought the community together in ways that go far beyond the TOD Village concept.

*What would you do differently?*

- ▶ Land banking should be utilized to help mitigate rising prices.
- ▶ Planners should deal directly with property owners and obtain site control before a project gets publicized.
- ▶ With respect to parking, it is preferable that public agencies not be included in the "chain of funding" for public improvement because their costs are normally higher than the private sector, and it can take much longer to design, bid, and build projects due to laws and regulations controlling public agencies.

*What else would you like to add?*

The Fruitvale Transit Village project risks becoming a victim of its own success as improvements drive up property values and increase taxes. FDC's response has been to initiate a Homeownership Program that involves buying, rehabbing, and selling homes at affordable prices in an attempt to mitigate the rising cost of homes in the area and stabilize our community.

The Fruitvale Transit Village is an example of an inner city neighborhood obtaining "environmental justice." Public transit is vital to inner city residents to access jobs and shopping. At the same time, however, transit and other transportation facilities often impact communities. For example, when BART was constructed, housing was lost and thousands of people began driving to the neighborhood to park. This Transit Village represents a combination of environmental improvements and economic development.

## QUESTIONS ABOUT TOD IN GENERAL

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Are there market, economic, financial or other factors that are unique to California TODs?*

- ▶ Fiscalization of land use -- Caps on property tax increases since Proposition 13 have forced local governments to opt for sales tax-generating land uses, irrespective of location.
- ▶ Cost and lack of housing -- without sufficient affordable housing, gentrification is a significant issue in most infill developments.
- ▶ Ballot box planning -- with so many ballot measures, statewide and countywide, during every election, the state legislature has been hesitant and/or unable to enact significant laws to finance or promote TODs.
- ▶ The California Environmental Quality Act (CEQA) is more stringent than NEPA. It is very time consuming to prepare a Draft EIR, and relatively inexpensive to challenge findings, at least administratively.

*What is stimulating developer interest in TODs?*

A number of developers are trying to establish themselves as “niche” developers. TODs are a unique product and there is a market for them in the future, particularly as greenfield development gets stopped by environmentalists. A number of developers are also establishing relationships with each other (housing, retail, office) such that, in concert, they can address the mixed-use nature of TOD. The field, however, is still very open.

*What are the barriers to TOD?*

The compliance requirements attached to public funding can be a major barrier.

*What kinds of information would be useful to reduce barriers to TOD development?*

Key information includes land or project value from developer’s perspective – what specifically a TOD project can return to a developer. Better descriptions of projects – need to use approaches to address density, affordable housing, traffic, etc.

*What development incentives or circumstances are most helpful?*

- ▶ Sustainable housing subsidies – help jurisdictions approve housing as part of TOD (now they tend to prefer sales tax generators).
- ▶ Infrastructure funds – this fundamental component of TOD (grid streets, pedestrian paths, etc.) typically does not produce a return on



investment and needs to be subsidized. Streets, pathways, small pocket parks, etc.

- ▶ From BART's perspective – funds for replacement parking.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

BART needs to continue to work cooperatively with communities at their other stations. Fruitvale has raised consciousness and awareness. As a result, grants have been obtained for BART to provide funding for a plaza, childcare, and parking.

The state could help support TOD by providing:

- a) Money – funds for infrastructure improvements, and sustainable funding for housing (revenues to local land use jurisdictions to induce them to support housing);
- b) Land – any excess land the state owns which can help form TOD project areas;
- c) Relaxation of street control, and trying to “calm” a street is very difficult.
- d) Information: Information to transit agencies that TOD is part of their core business, in addition to running trains. Emphasize all of the benefits of TOD, not just generating revenue.

*Are there other public sector actions that could be taken to encourage TODs?*

Establish a single clearinghouse agency for each level of government – Federal, State, County and City – capable of approving compliance with funding regulations.

## Moffett Park, Sunnyvale

Service Frequency:	Light rail: No projections available
Urban or Suburban location:	Suburban
Ridership (station, not TOD):	No projections available
Developer:	Jay Paul Company
Phone:	415.263.7400
Jurisdiction:	City of Sunnyvale
Contact name:	Trudi Ryan, Planning Director
Phone / email:	408.730.7435 / <a href="mailto:tryan@ci.sunnyvale.ca.us">tryan@ci.sunnyvale.ca.us</a>
Contact name:	Paul Spence, Associate Planner
Phone / email:	408.730.7431 / <a href="mailto:pspence@ci.sunnyvale.ca.us">pspence@ci.sunnyvale.ca.us</a>
Transit Agency:	Valley Transportation Authority (VTA)
Phone:	408.321.5744

### Overview

Moffett Park is an “unintentional TOD” leveraged by the developer’s ability to build a bigger building with a TOD design. In addition, the original proposed plan changed from office buildings surrounded by parking lots to one in which buildings are clustered along a walkway leading to the new Tasman West light rail line immediately adjacent to the property.

In order to qualify for a 60% increase in the allowable floor area ratio (FAR), the developer submitted a revised design. According to the City staff report: “Elements supporting the FAR increase include the provision of public art, more than minimum landscaping, on-site amenities such as the fitness center, restaurant, bicycle facilities, and plazas, construction of the new light rail station, excellent design, and use of high quality materials.”

The developer approached VTA and offered to pay the full cost of constructing a new station to serve the site (estimated at \$2.5 million). The design for the station has not been completed or submitted for permit approvals. The developer has two years after occupancy permits are issued for the office buildings in which to complete the transit station.

The City staff report states: “Construction of a light rail station is a unique and unprecedented measure to encourage alternative transportation use. A conceptual plan has been reviewed and approved by the City and the Valley Transportation Authority. Staff supports inclusion of this feature, but recommends a condition of approval that station construction be completed within two years of project



occupancy. Historically only 3% of employees in this region have used public transit. Staff believes that provision of a light rail transit station can provide sufficient incentives so that future ridership levels will increase.”

### **Parking**

The standard parking requirement in an Industrial/R&D Office zone is 1 parking place per 250 to 500 square feet. As part of the new design, and in support of transportation demand management goals, the developer agreed to a parking ratio at the lower end of the range – 1 space per 310 to 320 square feet. A maximum of 2000 total parking spaces will be built.

### **Lessons Learned**

Moffett Park is a powerful example of an incentive-based local plan leveraging a TOD design:

- ▶ The developer wanted the increased FAR and was willing to take significant steps to achieve that goal.
- ▶ The site design integrates a pedestrian spine oriented to transit and a conventional campus isolated from its neighbors by parking.
- ▶ Moffett Park shows the value of continuing efforts to reduce the number of vehicle trips associated with new developments.

As the economy has slowed, there may be increased reluctance to provide the level of on-site amenities that this developer agreed to.

In addition, the site configuration appears to allow only “private” (on-site) use of the station. It would have been better to have a public street and sidewalk between the station and the project buildings.

### **Interview Questions**

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

In order to qualify for an increase in floor area ratios (FAR), the developer changed the proposed project from office buildings surrounded by parking lots to a more transit-supportive design. The new design has buildings clustered along a walkway leading to the new Tasman West light rail line immediately adjacent to the property. The walkway features open spaces with fountains and seating. The developer approached VTA and offered to pay the full cost of constructing a new station to serve the site (estimated at \$2.5 million).

*Size of site: 26 acres*



*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*  
No

*Year project completed:* Not yet completed (as of March, 2001). The developer has two years after occupancy permits are issued for the office buildings in which to complete the transit station.

*Residential: total number of housing units:* None.

*Retail and commercial space:* None.

*Office space – total square feet:* 651,372 square feet (56% FAR)

*Location and type of parking?*

Surface parking lots ring the outside of the project.

A maximum of 2,000 parking spaces will be constructed. A landscape reserve may be developed in the future accommodating 100 additional vehicles or a park-and-ride lot.

*Who constructed parking?* The developer.

*What is the standard parking ratio for the area?*

The standard number of parking spaces in an Industrial/R&D Office zone in Sunnyvale currently ranges from a maximum of 1 per 250 square feet to a minimum of 1 space per 500 square feet.

*Does the jurisdiction have a separate parking requirement for TODs?* No

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?*

Not at this project, although shared parking is used by other developers to demonstrate compliance with TDM standards at other sites.

*Experience: Is there evidence of too much or too little parking being provided?*

Project is not yet occupied – too soon to tell.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The City has no specific TOD policies or programs.

However, the City's Transportation Demand Management (TDM) program, which requires that at least 15% of all on-site employees commute via other means than single occupancy vehicles, encourages transit-supportive development. The developer proposes to achieve a 15% alternative transportation mode use by encumbering the land to require any future tenant to provide a program to comply with City TDM goals. Other project-specific TDM and alternative transportation features include the construction of a station on the Tasman light rail transit line

to serve the project, provision of bicycle parking consistent with VTA Bicycle Technical Guidelines, and designated carpool and vanpool parking.

*What problems were encountered in implementing the TOD?*

None. The developer wanted the increased FAR and was willing to take significant steps to achieve that goal. As the economy has slowed, however, there may be increased reluctance to provide the level of on-site amenities that this developer agreed to.

*How was the project financed?* The developer provided 100% of the financing.

*Were any public financing measures used to create/facilitate the TOD?* No.

*Will the TOD increase any of the following:*

*Land use mix?* No, the project is a single use.

*Density?* Yes, especially with the increased FAR.

*Employment?* Yes. The project is proposed to be the corporate headquarters for Ariba, Inc., an Internet company that currently has about 800 employees, and expects to have a total of 1,100 to 1,200 employees late in 2000. It is anticipated that at full build-out there will be 2,000+ jobs.

*Will the TOD:*

*Increase ridership?*

It is assumed that on-site employees will contribute to ridership, particularly with the TDM encouragement to use transit.

*Improve transit service?* Yes. The proposed station will make service available to more people.

*Improve station aesthetic design?* The design has not yet been reviewed.

*Create a destination/attraction?* No.

*Has the TOD been successful in achieving these goals? How is the project performing?* The project has not been completed.

*What were the Lessons Learned?*

The value of continuing efforts to reduce the number of vehicle trips associated with new developments.

*What would you [the developer] do differently?*

The station appears to be for private use only. It would have been better to have a public street and sidewalk between the station and the project buildings.



QUESTIONS ABOUT TRANSIT-ORIENTED DEVELOPMENT, IN GENERAL  
*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*What is stimulating developer interest in TODs?*

Developers appear to be using access to transit as a justification to obtain higher densities.

*What are the barriers to TOD?*

General concerns regarding higher densities and taller buildings.

*What kinds of information would be useful to reduce barriers to TOD development?*

Reports that provide supportive documentation regarding higher densities, with positive examples. This type of information would be helpful for decision makers, including Planning Commissions and City Councils.

*What development incentives or circumstances are most helpful?*

The potential for increased floor area ratios (FARs) and unit counts seem to be powerful incentives.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Providing public information and support for proposed developments, including examples of other projects that have been successful.

*Are there other public sector actions that could be taken to encourage TODs?*

Providing public funding in the form of subsidies or loans to the project.

## Ohlone-Chynoweth, San Jose

Service Frequency:	10 minute (peak) 20 minute (off peak)
Urban or Suburban location:	Suburban
Ridership (station, not TOD):	1,551 average weekday
Developer:	Eden Housing
Contact name:	Jeff Bennett, Project Manager
Phone / email:	510.582.1460 / <a href="mailto:jbennett@edenhousing.org">jbennett@edenhousing.org</a>
Jurisdiction:	San Jose
Contact name:	Michele Campos, Senior Planner
Phone / email:	408.277.4576 / <a href="mailto:michele.campos@ci.sj.ca.us">michele.campos@ci.sj.ca.us</a>
Contact name:	Gary Richert, Senior Development Officer
Phone / email:	408.277.2251 / <a href="mailto:gary.richert@ci.sj.ca.us">gary.richert@ci.sj.ca.us</a>
Transit Agency:	Valley Transportation Authority (VTA)
Phone:	408.321.5744

### Overview

Spanning two generations of TOD, Ohlone-Chynoweth includes housing and community facilities developed on an under-used light rail park-and-ride lot. For this project, VTA issued a request for proposal seeking a developer for the 7.3-acre site.

The former 1,100-space park-and-ride lot now includes a variety of uses: 240 park-and-ride spaces, 330 units of affordable housing, 4,400 sq. ft. of retail, and a day care center. At 27 dwelling units per acre, the residential density is relatively high compared to the predominantly single family neighborhood surrounding it.

Although the City used an expedited process for application review, the number and type of issues raised by six homeowner associations in the area (lack of school capacity, increased traffic and loss of taxpayer-built parking at the light rail station) resulted in City Council deferring decisions several times.

An earlier project adjacent to the site has 135 units of affordable housing built by Bridge Housing. With the Eden proposal of 195 units, the neighbors were concerned about a total of 330 units of affordable housing in one area. After several meetings, the City Council approved the project because they found the community will benefit from the additional housing, day care center and the retail uses.



### **Project Financing**

The \$31.6 million project included \$14.5 million in tax-exempt bonds, \$10.5 million in tax credit equity, a \$5.2 million loan from the City to support affordable housing, \$824,000 in federal transportation funds for improvements, a \$500,000 Affordable Housing grant, and \$350,000 State Proposition 1 funds to reimburse the school fee.

Lack of TOD experience within VTA and few examples of similar developments required proponents to work hard to convince major stakeholders, such as bankers, to support the project.

### **Lessons Learned**

VTA staff faced the challenge of having no “TOD institutional memory.” The people who learned from previous experience developing a TOD were no longer with the company or agency when the next TOD was proposed (acknowledging that there is no single model to follow – each station is unique and the process changes to match it).

Working out issues with the homeowner associations and the school district helped City staff discover a process that will facilitate future projects.

### **What would you do differently?**

VTA staff offered the following observations on the implementation and design of the TOD:

- ▶ Pay more attention to the program aspect of the project to ensure success of the retail, childcare center and computer space. For example, identify local businesses that would be particularly appropriate for the TOD and then offer them reduced rent for a period of time to assist them in getting established.
- ▶ Place small retail spaces along the street, rather than at a single node at the station. This can encourage the larger neighborhood to patronize the businesses. As it is, the retail is somewhat isolated.
- ▶ Design pathways to provide direct connections to nearby neighborhoods. In this case, residents of the adjacent single-family neighborhood must use an indirect path around the parking lot, which does not encourage them to use the station or patronize the retail.
- ▶ Hold meetings with the homeowners associations early in the process. Arrange to meet with representatives of all affected groups at the same time.

## Interview Questions

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

VTA owns the land and issued a Request for Proposal seeking a developer to whom the land would be leased.

*Size of site:* 7.3 acres

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?* The City used an expedited process for application review; however, the number and type of issues raised by six homeowner associations concerned with the project resulted in the City Council deferring decisions several times.

*Year Completed:* 2001

*Was the TOD built before, during or after the station was built and transit became available?*

After – the site had been a 1,100-space park-and-ride lot that was reduced to 240 spaces and reconfigured to allow for the TOD.

*Residential: total number of housing units:* 195 units

Housing types: Two- and three-story townhouses

Affordable to median income households? 100% of the units are affordable

Retail and commercial space: Total 4,400 square feet

Office space: # sq. ft.: None

*Location and type of parking?*

The surface parking lot near the station is intended for park-and-ride transit users. Podium (semi-depressed) parking for residents is located below their housing and some units have garages. Parking is also provided for the retail space and the day care center.

*Number of spaces?* 366 spaces for the TOD and 240 park-and-ride spaces.

*Who constructed parking?* VTA provided the park-and-ride surface lot and the developer built the TOD-related spaces.

*What is the standard parking ratio for the area?*

The TOD was required to meet standard parking ratios to ensure that there was no spillover into the park-and-ride lot.

Commercial/retail:	4,400 square feet	19 spaces
Day care:	3,000 square feet	13 spaces
Community room:		6,000 square feet 0 spaces (assumes resident users)
Residential:	195 units	334 spaces



*Does the jurisdiction have a separate parking requirement for TODs?*

No, although the City does allow a density bonus to projects within 2,000 feet of a light rail station.

*If there is no separate ratio, how is TOD parking addressed?* Through variance procedures

*Are any creative parking strategies being tried?* The project has not yet opened, so it is too soon to tell whether such strategies will be needed.

*Experience: Is there evidence of too much or too little parking being provided?* The project will not formally open until May 2001.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The City provided a \$5.2 million loan to the developer to support affordable housing. Housing is extremely expensive in San Jose and the City supports the creation of more affordable units.

San Jose would like to focus more new development near transit. Zoning for the site was changed to Transit Corridor High Density Residential, which allows at least 12 units per acre. Average high-density development in the area is 20 to 25 units per acre. The City provided funds to cover the cost to the developer of obtaining a specific rezoning that allowed a density of 27 units per acre.

*What problems were encountered in implementing the TOD?*

Lack of experience and few existing examples of similar developments required proponents to work hard to convince major stakeholders, such as bankers, to support the project.

Interagency coordination difficulties and bureaucratic hurdles (e.g., difficulties in getting FTA approval for a grant) were an obstacle. VTA had to retain title to the property as a condition of receiving an FTA grant, causing Eden Housing difficulty in finding a bank willing to loan for housing on land the developer did not own.

Public opposition was a problem. The single-family neighborhood across the street opposed the project (probably) fearing spillover parking and the impact of affordable housing.

The six-homeowner associations in the area raised several issues, including: lack of school capacity, increased traffic, and loss of taxpayer-built parking at the light rail station.

The existing housing project adjacent to the site has 135 units of affordable housing built by Bridge Development. With the Eden proposal of 195 units, the neighbors were concerned about having 330 units of affordable housing in one area.





*How were these problems overcome?*

Considerable effort was made by the City to allay the fears and opposition of the neighbors. After several meetings, the City Council decided to approve the project as the community will benefit from the additional housing, the day care center and the retail uses.

The developer was required to pay a fee to the school district before receiving permits from the City. The fee was based upon a projection of 300 additional K through 12 students attending local schools. (Note: these fees are no longer charged).

Eden Housing worked hard to obtain necessary financing for this project.

*Which Development Team Member took the lead?*

Different team members, depending upon the situation.

*Did the solution to the problems affect the design or implementation of the TOD? No*

*Have barriers prevented other TODs from being developed? No*

*How was the project financed?*

Total development costs are \$31.6 million. Sources: \$14.5 million tax exempt bonds, \$10.5 million tax credit equity, \$5.2 million loan from the City, \$574,000 Metropolitan Transportation Commission grant (using Urban Mass Transit funds) for landscaping and improvements at the station, \$250,000 FTA grant for the surface parking lots, \$500,000 Affordable Housing Grant and \$350,000 State Proposition 1A funds to reimburse the school fee.

*To what extent does the TOD provide community services?*

The development includes a childcare center that is open to the public, and residents may also use its outdoor play area during “off hours.” The project’s community room includes a variety of spaces for residents to use, including a library, meeting room, and a computer room.

*Has the TOD increased any of the following:*

*Land use mix* – The TOD has a diversity of uses including retail, community center and child care center, while the surrounding area is residential.

*Density* – Project has increased the residential density, with 27 units per acre as compared to the predominantly single family neighborhood.

*Employment* – The number of permanent jobs created by the TOD will be limited to the retail space and childcare center, neither of which is open yet.



*Has the TOD:*

*Increased ridership?*

Effects on ridership cannot be determined until residents move into the new units and the retail space is occupied.

*Improved transit service?* Service is unchanged.

*Improved station aesthetic design?*

The quality of the station environment has been improved.

*Created a destination/attraction?* Only for the residents of the immediate area.

*Has the TOD been successful in achieving these goals? How is the project performing?*

It is an example of successful joint development, but there are elements that could be improved.

The TOD is a positive addition to the area and the day care center provides a much needed service.

*Have any follow-up studies been done on the TOD?*

No, the project has not officially opened.

*What were the Lessons Learned?*

- ▶ The people who have learned from the earlier experience of developing a TOD are no longer with the company or agency when the next TOD is proposed. The months-long negotiating process cannot be captured in the notes that remain as the written record, so it is difficult to learn from this prior experience.
- ▶ There is no single model to follow – each station is unique and the process changes to match it.
- ▶ Working out the issues with the homeowner associations and the school district helped City staff learn the process that will facilitate future projects.

*What would you do differently?*

- ▶ Pay more attention to the program aspect of the project to ensure success of the retail, childcare center and computer space. Identify local businesses that would be particularly appropriate for the TOD and offer them reduced rent over a period of time to assist them in getting established.
- ▶ Create small retail spaces along the street, rather than at a single node at the rail station. This could encourage the larger neighborhood to patronize the businesses. As it is, the retail is somewhat isolated.
- ▶ Move the pedestrian pathway to make a more direct connection with the single-family neighborhood across the street. These neighbors must use an indirect path around the parking lot, which does not encourage them to use the rail station or patronize the retail.



- ▶ Hold meetings with the homeowner associations earlier in the process.
- ▶ Arrange to meet with representatives of all the groups at the same time.

#### QUESTIONS ABOUT TODs IN GENERAL

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

##### *What is stimulating developer interest in TODs?*

A shortage of raw land has encouraged developers to contact transit agencies in search of sites.

Many developers also appear to have the mistaken idea that VTA has funds to support the construction of housing near stations. They are seeking joint development opportunities that would require VTA to have responsibility for the finished product.

##### *What are the barriers to TOD?*

- ▶ From the perspective of a transit agency, there must be a desire on the part of the Board to develop TODs, and this must be supported by policies, procedures and financing.
- ▶ Financing is difficult to obtain, even if the agency owns land at the station. Financing could be set up in advance, with the land purchased and money set aside for the purpose of TOD, but this is not currently being done.
- ▶ Plan reviews and the time required for them are a problem for developers.
- ▶ It is difficult to find a good TOD developer; most just want to build the product they have experience with.
- ▶ There is a lack of enlightened bankers who are willing to fund mixed-use developments rather than single purpose projects (e.g., residential).
- ▶ There are interagency barriers between VTA and the City that are created by not sharing expertise regarding TOD.
- ▶ Neighborhood perceptions regarding low-income housing and the people who will live there are difficult to overcome.

##### *What kinds of information would be useful to reduce barriers to TOD development?*

Increased sharing of information and expertise between the City and VTA.

Information regarding the income levels that qualify for low-income housing and examples of the jobs that earn these incomes (e.g., teachers, perhaps).

##### *What development incentives or circumstances are most helpful?*

The San Jose housing market is currently so strong that incentives are not needed if the project involves market rate housing. Affordable housing requires a large number of



grants and loans to support the construction of units that will rent for perhaps one-third of market rates.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

There is no reason for a transit agency to be involved in “mono culture, market rate development”. However, agencies do have a role in promoting projects that demonstrate state-of-the-art mixed-use TOD. Agencies can, without getting too far out in front, critique existing TODs and then show the market what can be done. There is ongoing need for improvement, and transit agencies could demonstrate the latest success with a new TOD every few years.

*Are there other public sector actions that could be taken to encourage TODs?*

The key is financing for TOD. Perhaps a state level financial organization could be established to provide the funds necessary.



## Pleasant Hill Bart Station Area

Service Frequency:	BART Weekday peak 5 to 10 minutes, non-peak 15 minutes
Urban or Suburban location:	Suburban
Ridership (station, not TOD):	6,864 (average weekday 2001)
Developer:	Millennium Partners (San Francisco/New York)
Contact name:	Mark Farrar
Phone / email:	415. 274-9150 / <a href="mailto:mfarrar@milleniumptrs.com">mfarrar@milleniumptrs.com</a>
Jurisdiction / Urban Renewal Agency:	Contra Costa County Redevelopment
Contact name:	Jim Kennedy, Deputy Director
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### Overview

The Pleasant Hill BART station area is one of the best examples of suburban TOD development in the United States. It has been implemented over more than 20 years, and continues to evolve. TOD planning for the Pleasant Hill BART station is now entering its second phase of planning and development (below).

### Brief History

#### *Phase I: 1980s – 1995*

The Pleasant Hill BART Station Area comprises 140 acres surrounding the Pleasant Hill Station. Built in the early 1970's, the station is now strategically located where BART, I-680, a major sub-regional arterial and a regional trail converge. The County adopted the Pleasant Hill BART Station Area Specific Plan in 1983. The companion Redevelopment Plan was adopted the following year.





### *Phase II: 1995 – 2001*

In 1995, working with the County Redevelopment Agency, BART researched market interest in turning its 18-acre surface parking lot into a TOD. Millennium Partners development company was subsequently selected through a request for proposal (RFP) process for this project.

In 1997, the County began a two-year process of amending the Specific Plan for the TOD area. The amended plan called for less intensive development than originally envisioned. Development designations on BART's property were reduced from a potential 1.2 million square feet of commercial development to 800,000 square feet, and from 95 dwelling units per acre to 65 dwelling units per acre. The amended plan also required that BART involve the community in the design and planning process for its property.

During 1999, in compliance with the required planning process, the County and BART shared expenses for hiring a planning/consultant team as part of an ongoing public process. Several public meetings were held at that time, but only 20 to 30 people participated, which was the County did not believe was sufficient public involvement. Donna Gerber, a County Supervisor, learned about the 'charrette' interactive design process. A second planning process was initiated early in 2001 using this process, with a much higher level of public participation and favorable results.

As of March 2001, the new draft project proposal includes: 290,000 to 456,000 square feet of office space, up to 274 to 446 apartments and townhouses, up to 50 for-sale units, a town square and community green, a child care facility, and about 42,000 square feet of ground-floor retail and restaurants.

At full build-out, Pleasant Hill will be a major employment center. Neighborhood groups do not want it to become a commercial/retail destination, however. An earlier proposal would have created an entertainment attraction that would have been more transit-supportive by bringing riders in during off-peak times on a reverse commute. After two years of controversy, the multiplex entertainment center part of the project was dropped.

BART, the County, and the Redevelopment Agency continue to work together to build community support for development.

### **Parking**

As part of the TOD, the County Redevelopment Agency would finance the replacement of BART parking, as well as assisting with providing other public facilities and affordable housing. Subject to negotiations, the Redevelopment Agency would be a partner with BART in a long-term ground lease, and would receive a proportionate share of revenues from new development.

Commuter parking for the station remains at capacity, as BART ridership is drawn from a wide area. To recover the 1,477 surface parking spaces that BART will lose



by leasing its land for new transit-oriented development, replacement parking will be provided in a new garage. Private parking for residential and commercial uses will be provided within those buildings.

Proposed parking ratios for Phase II of the TOD (e.g., development of BART property) are reduced below the County standard rates as follows:

- for offices, from five spaces per 1000 sq. ft. of interior space, to 3.3 spaces;
- for retail uses, from five spaces per 1000 sq. ft., to four spaces; and
- for residential units, from 1.75 parking spaces per housing unit, to 1.35 spaces per unit.



Lennertz and Coyle Associates  
/ Seth Harry

These reduced ratios account for transit availability. However, they are an increase from the original station area plan. The original station area residential parking ratio requirement of 1.1 space per dwelling unit was found to be inadequate in this situation, which is why it has been increased to 1.35 spaces. During the most recent planning process, the Commuter's Alliance (which is comprised of transit users) objected to any plans affecting the 581 temporary parking spaces along the railroad right-of-way that is to become green space. The charrette plan now provides that these 581 temporary spaces also be included in the expanded garage.

### Lessons Learned

Staff involved with the Pleasant Hill BART station project offer these 'lessons learned':

- ▶ Developing a TOD is a long process, particularly in an infill setting. It is important to formalize agreements while the people who adopted the plan are still in decision-making roles.
- ▶ Having a strong community process from the beginning, including people throughout the region representing broader interests, is critical.
- ▶ The County's political and financial support has been critical to project development.
- ▶ The importance of a determined political advocate (County Supervisor Donna Gerber) who is persistent in working to achieve community consensus cannot be overstated.

## Interview Questions

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

The County and its Redevelopment Agency took the initiative in arranging the recent series of charrettes in early 2001 to achieve the agreements necessary for the BART parking lot phase of the TOD to move ahead.

In 1995, as part of the process of amending and re-approving the combined Development Agreement / Disposition & Development Agreement, the County and Agency requested that BART research potential market interest in the property by issuing a Request for Proposal (RFP). Out of the seven submittals received, the proposal of Millennium Partners was selected for further discussion. After two years of controversy, the portion of the proposal calling for a multiplex entertainment center was dropped; however, Millennium Partners remains the prospective developer with an exclusive right to negotiate a ground lease with BART.

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

Yes. During the 1980s, the County Redevelopment Agency assembled properties, occasionally using eminent domain. The Agency also financed a portion of the infrastructure cost. Affordable housing also received financial assistance. Regarding Phase II, the Redevelopment Agency will finance the replacement parking and assist with public facilities that may be programmed into the development, as well as with the affordable housing part of the project.

*Location and type of parking?*

Surface lots will be replaced with structures. The area's high water table makes underground parking lower than one level below grade very expensive.

*Number of spaces?*

There are 3,450 parking spaces for transit users, 581 of which are temporary from the Iron Horse Trail, leaving 2,869 permanent spaces. 1,477 of these spaces are in BART's surface lots and must be replaced for transit riders. The charrette plan includes all 3,450 spaces in expanded BART parking structures.

*Who constructed the parking?*

For Phase II, the County Redevelopment Agency will finance the replacement of BART parking, and also assist with public facilities and affordable housing as part of the TOD. Subject to negotiations, BART and the Redevelopment Agency will each receive a proportionate share of future long-term ground lease revenues from new development. When the Redevelopment Agency ceases to operate in 25 years, the County will then become the recipient of the revenue stream.



*What is the standard parking ratio for the area?*

- 5.0 spaces per 1,000 square feet for office and retail
- 1.75 spaces per unit for residential

*Does the jurisdiction have a separate parking requirement for TODs?*

The Specific Plan for this TOD now establishes the following parking ratios:

- 3.3 spaces per 1,000 square feet of office
- 4.0 spaces per 1,000 square feet of retail
- 1.35 per residential unit

*What was the method used to develop and support a TOD parking ratio?*

The original planning for the TOD included surveys on which reduced parking ratios were based (which were lower than those listed just above). The early plans were very aggressive in reducing parking. Subsequent experience modified the standards to their current level.

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?*

Shared parking between hotels and office uses.

*Experience: Is there evidence of too much or too little parking being provided?* The portion of the TOD that was developed earlier (e.g., Phase I) provided even lower commercial parking ratios of 2.6 to 2.8 spaces per 1000 square feet, and these portions of the project have been shown to be under-parked at times. Developments that have 3.3 to 4.0 per 1,000 square feet of office or retail appear to have sufficient parking and are now able to lease some spaces on a monthly basis to BART patrons. The original residential parking ratio of 1.1 spaces per dwelling unit has proved to be too low for this site, and is therefore being raised to 1.35 spaces in Phase II (e.g., the development of the BART parking lot).

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The County requests commercial property owners to collectively meet the transportation demand management (TDM) goal of 30% non-single occupancy vehicle trips. To accomplish this, they have joined together to form the Contra Costa Center Association TDM Program and contribute funds to achieve the goal. Based upon survey results showing that most people would like their children cared for nearby, this group is also providing funding to develop on-site childcare facilities as well as financial assistance to offset childcare costs for lower income employees in the area.

*What problems were encountered in implementing the TOD?*

A major challenge of the development is that it sits at the confluence of three cities. All three cities joined with the County in planning for the TOD. However, when the



economic aspirations for their downtown areas were not met, they changed their positions on the plan. For example, when the original proposal by Millennium Partners included a mix of office and entertainment anchored by a multiplex theater, the cities objected in an effort to protect their market share. Nearby residents also objected to a cinema (a common element of all seven proposals) and the proposal was withdrawn. However, Millennium Partners has continued interest in developing the site with a mix of office/residential/retail. Waning support for road widening improvements also led to the elimination of traffic mitigation measures and a greater emphasis on alternative mode enhancements. One implication of a reduction in planned roadway improvements was a commensurate reduction in development rights for the property.

Other groups have expressed opposition to development of BART's site. The Commuters Alliance comprised of park-and-ride transit users, objects to any plans affecting the 581 temporary parking spaces along the railroad right-of-way that is to become green space. Newer, non-voting members of the nearby private swim club opposed the club board's offer to sell the property to the County, which would use it for replacement parking. These issues have been discussed during several design charrettes.

*How were these problems overcome?*

The Redevelopment Agency seeks to build consensus through public discussions. The charrette for the BART property is the most recent example of their efforts to find solutions.

A Steering Committee consisting of neighborhood representatives, commercial property owners, and staff from the County (2), the three Cities (2), and BART meet regularly to address issues.

BART is not attempting to force a project through over community objections. Instead, BART, the County, and the Redevelopment Agency continue to work together to build community support for development.

*Which Development Team Member took the lead?*

The Redevelopment Agency has consistently led the TOD effort. More recently, County Supervisor Donna Gerber has become a strong advocate for building consensus through the charrette process.

*Did the solution to the problems affect the design or implementation of the TOD?*

Yes, the design has changed from an office/entertainment mix to an office/residential/retail mix. The development standards will now also reflect 'New Urbanist' design principles.

*How was the project financed?*

The entire area is an Assessment District and locally-raised funds financed two-thirds of the area's infrastructure expenses. Tax increment financing (TIF)





through the redevelopment area provided the other one-third of infrastructure costs, as well as public amenities.

Over 250 units of affordable housing included in the 1,800 units already built were financed using a variety of sources, such as tax exempt bonds, Community Development Block Grant, HOME, and tax credits.

For Phase II, TIF funds could be used to finance future BART replacement parking. A Federal Highway Administration grant was used to finance the existing BART parking. The commercial portion would be all privately financed with the only assistance provided by the Redevelopment Agency to be assembly of parcels.

*To what extent does the TOD provide community services?*

A childcare center is already part of the TOD. In phase II, some public facilities will be included in the BART project, although these have not yet been defined.

*Has the TOD increased any of the following:*

*Land use mix?* Yes, the area originally included 140 single-family homes on large lots. At build-out under the most recent plan, the area will contain approximately 2.5 million square feet of commercial uses and 2,300 housing units.

*Density?* Yes. The entire TOD has increased density and the BART portion will do so by virtue of having an office/residential/retail mix.

*Employment?* Yes. At its current level of development, there are 5,000 jobs in the TOD, and when it has been completely built out, there are expected to be 7,000 jobs.

*Has the TOD:*

*Increased ridership?*

Yes. 10% of local employees use BART. Surveys indicate that 40% of residents living within one-quarter mile of a BART station use transit service regularly. Many of the new employees and residents that will be brought into Pleasant Hill BART station area by the proposed development are expected to use transit.

*Improved station aesthetic design?*

Yes. The BART property development offers an opportunity to give the current station a needed "face-lift".

*Created a destination/attraction?*

The area will be an employment center and a destination for BART riders.





*Has the TOD been successful in achieving these goals? How is the project performing?*

The TOD is a success, particularly regarding its primary goal of supporting alternative transit, and is performing well economically. In 1983, when a plan was originally prepared, no one believed it would take over 20 years to implement.

The transit station is at capacity, which is one indication of success; however, transit ridership is drawn from a wide area. BART wanted to develop its site as the heart of the TOD, and it is frustrating for the transit district to be the last property to be developed and now face political pressures that impact the design. However, it is hoped that the latest proposal will be successful.

*What were the major 'lessons learned'?*

- ▶ Undertaking a TOD can be a very long process, particularly in an infill setting such as Pleasant Hill BART Station.
- ▶ It is important to get all agreements in place while the people who adopted the original plan are still in decision-making roles. As the participants and the political dynamics change, the basis for previous decisions can be forgotten or discounted.
- ▶ A partnering of the public and private sectors is needed, and the partnership must have financial capital investments from both parties to be successful. Political capital alone is insufficient.
- ▶ It is critical to have a strong community planning process in place from the beginning.
- ▶ Support and participation are needed from people throughout the region so that broader interests are represented. There is a public benefit to having growth focused at major transit nodes. Pleasant Hill BART Station is a regional station although some neighbors want it limited to serving local needs due to concerns about traffic and competition with city market shares.
- ▶ The County's political and financial support has been vital – the process would not have been possible without them.
- ▶ It is important to have a determined political advocate or "champion," like County Supervisor Donna Gerber, who is persistent in pushing for a process to achieve community acceptance to move forward. Former Supervisor Sunne McPeak played an important leadership role in the earlier phases of the project.

*What would you do differently?*

- ▶ The project should have sought a higher level of initial buy-in by the three adjacent cities to address issues of revenue sharing to prevent land use battles over fiscal issues.



- ▶ Start using the charrette design process years earlier in the planning process, since it has demonstrated success.
- ▶ Revise the responsibilities of the Pleasant Hill BART Steering Committee. It was formed in the 1980s as an advisory body but it has become a forum for political disagreements.

*Comments About Transit-Oriented Development, in General:*

*(Please note: the opinions expressed below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Are there market, economic, financial or other factors that are unique to California TODs?*

California's strict environmental compliance may be unique; it also slows down the review process. Oakland, for example, has dealt with this problem by creating a Transit Village overlay zoning designation with incentives for TOD, and the City's General Plan highlights TOD.

There is a perception that two of BART's policies tend to make joint development more challenging:

- ▶ The "one-for-one" replacement parking policy (requiring developers to replace any transit parking spaces); and
- ▶ BART's elected legislative body approves proposals; there is a perception that this tends to further politicize land use issues.

*What is stimulating developer interest in TODs?*

- ▶ Contra Costa County supports Smart Growth with an urban limit line that encourages infill. The County also believes that TOD is 'the right thing to do'.

Other factors stimulating developer interest in TOD are:

- ▶ The strong housing market.
- ▶ Social conscience of developers.
- ▶ City incentives have made TOD more attractive.
- ▶ A mixed-use development may be more financially sustainable.

*What are the barriers to TOD?*

- ▶ Neighborhood opposition to higher densities is a barrier.



- ▶ Market capacity – in this case the nearby cities challenged the County to protect their own plans for downtown areas with a similar mix of office and entertainment.
- ▶ The cost of replacement parking is high, and parking competes with mixed-use development. The demand for BART commuter parking has risen 15% in the last year and the spaces are full.

*What kinds of information would be useful to reduce barriers to TOD development?*

- ▶ The ability to access redevelopment tools, particularly land assembly and tax increment financing, without having to make a finding of “blighted condition”.
- ▶ More information is needed regarding the benefits from TOD – in both economic and social terms. The benefits of safer stations, stronger connections to the community, economic development, and reducing auto trips by providing services at stations are all “soft benefits” of TOD for which there is little documentation.

*What development incentives or circumstances are most helpful?*

- ▶ Land assembly
- ▶ Infrastructure financing
- ▶ Affordable housing financing
- ▶ Funds to replace BART parking
- ▶ Flexibility regarding the amount of parking required for TOD and design requirements such as building set-backs.
- ▶ Cities committing to facilitating and expediting the permit process.
- ▶ City staff assisting with consensus building in their community.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Transit is a function of land use patterns, and land use has to change to allow high density at nodes that are, or will be, served by transit.

There is a perception among some of those interviewed that transit agencies could be much more supportive of each other when regional projects are going through a public process.

The federal Transportation for Livable Communities small grant funds, require a process that is too lengthy and involves too much paper work for the amounts of money available.



*Are there other public sector actions that could be taken to encourage TODs?*

A TOD Tax Increment District, as described above, could help, especially in greenfield areas where a finding of “blight” cannot be met.

State level incentives would help jurisdictions accommodate TODs. For example, greater access to transportation dollars (gas tax, etc.), housing funds, and other money those local jurisdictions can use for discretionary uses (general fund revenues).

## **Southern California:**

### **Hollywood/Highland, Los Angeles**

Service Frequency:	Every 10 minutes
Urban or Suburban location:	Urban
Ridership (station, not TOD):	10,580 daily boardings and debarkations
Developer:	TrizecHahn Centers
Contact name:	David Malmouth
Phone:	303.993.7720
Urban Renewal Agency:	L. A. Community Redevelopment Agency (CRA)
Contact name:	Kip Rudd, City Planner
Phone / email:	213.977.1761 / <a href="mailto:crudd@cra.ci.la.ca.us">crudd@cra.ci.la.ca.us</a>
Transit Agency:	Los Angeles Metropolitan Transit Authority (MTA)
Contact name:	Kevin Michel, Project Manager
Phone / email:	213.922.2854 / <a href="mailto:MichelK@MTA.NET">MichelK@MTA.NET</a>

#### **Overview**

The Hollywood Highland TOD was constructed above the Metro Red Line subway at Hollywood Blvd. and Highland Ave in Southern California. It opened on Friday, November 9, 2001. The Academy Awards presentation took place in the Kodak Theater on March 24, 2002.

To implement this project, a 'request for proposal' for the project was issued jointly by the Community Redevelopment Agency (CRA) and the City of Los Angeles (LA) in coordination with the LA Metropolitan Transit Authority (MTA). The complex combines 1.3 million square feet of specialty retail, multiplex theaters, restaurants, a 640-room Renaissance Hotel, the restored Graumann's Chinese Theatre, a 3,000 space underground parking structure, plus the Kodak Theatre – the new permanent home for the Academy Awards.

TrizecHahn holds a land lease for up to 99 years from MTA, and owns and operates the retail projects (a 55-year lease for the 1.35 acre property has already been agreed to for \$492,000 per year). The City of Los Angeles owns and operates the theater and parking structure, and the MTA owns and operates the station and transit facilities.

The subway station and the complex were under construction simultaneously. The station was completed and service began in June 2000. The TOD was completed in November 2001.



This TOD is increasing the land use mix, density, and employment of the area. It is in an important location and will become a major destination/ attraction. Due to increasing ridership, the Red Line now has six-car trains at peak times.

### **Project Financing and Public Agency Participation**

Simultaneously constructing the TOD and the Red Line station presented major coordination challenges. Apart from normal underwriting issues (e.g., lease up requirements), the developer felt that there were no significant problems arranging financing for the project.

The City of Los Angeles financed the garage and the theatre through two separate bond offerings. An \$81 million bond for parking is to be repaid from parking fees, business license fees, the transient occupancy tax for the project, and \$20 million in developer equity.

The development results from the assembly of eight separately owned parcels, only one of which (50,000 square feet) was owned by MTA. The MTA parcel is on a long-term lease for 60 years with four 10-year extensions.

### **Lessons Learned**

The Hollywood Highlands TOD is a dramatic example of the need to start TOD planning early so the design of the transit facilities and other development fits together as well as possible. In this case, MTA started construction with a design that did not lend itself well to the addition of a large structure on the street level, even though it is located in a district where this is appropriate. The “fast track design” caused subsequent construction problems.

This project heightened awareness of the need to have seasoned construction managers involved early in negotiations and schedule coordination. Fortunately, a construction manager who had significant experience and credibility represented MTA. He was able to respond to demands to speed up station completion by establishing realistic schedules and, further, by identifying areas where the developer could facilitate the process.

MTA believes that they will benefit from the project, noting that most of the problems experienced are typical of large and complicated projects. Other station areas now in design are quite different from this one, as is appropriate since each one has to fit into its surroundings.

### ***Interview Questions***

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)* Note: this interview was conducted before the project was completed.



*What is the nature of the project?*

Hollywood/Highland is a major mixed-use destination project featuring retail, entertainment, and lodging uses that is currently in the final stages of construction with a projected opening date in November, 2001. The project is located on the Red Line Subway of the MTA and is one stop south of the MTA station at Universal Studios, a major Southern California theme park. The Hollywood/Highland MTA station is now open.

The development sits on an 8-acre site and is vertically oriented with buildings up to five stories in height. The development program is intended to take advantage of the strong potential of this area for tourism, which is estimated at 8 to 10 million visitors per year. The project includes:

Retail: 375,000 square feet with no department store anchors and approximately 70 tenants. Major tenants include a DFS Galleria Store, the Gap, and numerous specialty retailers. Restaurants will occupy approximately 100,000 square feet of space.

Hotel: A 640-room Renaissance Hotel (part of which includes a former Holiday Inn hotel on the site).

Movie Theater: A 6-plex (Chinese 6 Theatres) totaling 40,000 square feet will be linked to the forecourt of the adjacent Graumann's Chinese Theater.

Theater: A 3,500 seat theater (Kodak Theatre) is the new home of the Academy Awards ceremony, as of March 2002. The facility is owned by the City of Los Angeles and will be managed by Anschutz Entertainment Group (manager of the Staples Arena in downtown Los Angeles).

Ballroom/Event Space: 40,000 square feet of stand-alone ballroom and breakout space. The hotel will manage reservations, and Wolfgang Puck Catering will manage food service.

Broadcast Studio: 7,000 square feet. The developer is currently in negotiations with several networks.

Public Space: Public plaza with views of the "Hollywood" sign.

Parking: 3,000 spaces in a below-grade structure owned by the City. While this figure is higher than what the parking code would require, given the visitor traffic and evening peak uses, the developer considers the project under-parked. The lot is owned by the City of Los Angeles. Rates will include a 2-hour validation from the theater, with \$3 thereafter to a maximum rate of \$5.

*What is the standard parking ratio for the [urban] [suburban] area?*

Standard ranges from 2 to 4 spaces per 1,000 square feet of commercial, depending upon the area.



*Does the jurisdiction have a separate parking requirement for TODs?*

No, but there is a reduced parking requirement in redevelopment areas of 2 spaces per 1,000 square feet for office/retail. The basis for this number is unclear, but is based on the idea that less required parking is necessary to stimulate development in blighted communities.

CRA/LA wants to reduce the amount of parking provided in redevelopment areas and encourage people to park once and walk to destinations. They recognize that some parking must be provided, especially since in L.A. people drive to the subway stations, but they don't want to provide an overabundance of parking.

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?*

Yes, CRA is looking at a District Valet idea that would involve picking up cars at the Hollywood/Highland TOD or nearby and parking them in the structure. They encourage shared parking by overlapping uses.

*Experience: Is there evidence of too much or too little parking being provided?* It is too early to tell.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

No written policies or programs were in place, but MTA already owned some of the land and CRA was able to urge other landowners to sell without using eminent domain. The property was zoned high density (4.5:1 FAR) because of a project proposed for the site in the 1980's. When the City later down zoned much of the area, they left the high-density zone in place, meaning this was virtually the only site in Hollywood where the TOD could be developed under current zoning.

*What problems were encountered in implementing the TOD? How were these problems overcome?*

The problems were typical of a large and complicated deal. Negotiating the ground lease and joint development agreement took time and patience. The hillside homeowners objected to a large building that would impair their views. Adjacent neighbors objected to the street closure, as did the hillside neighbors who used the street as a short cut to their homes. A public access way along the northern boundary of the project will be provided to serve these needs. Occasional gridlock on nearby streets caused other neighbors to object to having more traffic being brought to the area.

The parking bond was the first time this procedure had been used (site-specific revenues repay the bonds). It took time to convince everyone to go along with the deal structure.

Coordination issues arose as a function of constructing two projects simultaneously. Since the MTA station was under construction when the TOD was proposed, some of the station infrastructure had to be redesigned to allow more space for development. TrizecHahn absorbed the cost of the redesign as well as the expense of having MTA review and accept the new design and monitor its construction. TrizecHahn posted bonds

to assure MTA that if their project was not completed, there would be sufficient funds available for the agency to correct any problems that arose.

Occasionally, it was necessary to bring in the Mayor's office to work through a problem. The project was very visible politically, and the site was one of several being considered by the Academy Awards for their permanent location, which increased pressure to meet the developers' needs so that the site would be selected.

At the same time, MTA had an obligation to complete the station on time and within budget. It took time to get all of the parties to recognize what constituted reasonable requests. Once the process got through the "bluffing and posturing stage" and lawyers left the room, the construction managers, who were very experienced, were able to develop a coordinated schedule.

A strong effort by all parties was necessary. There were ongoing coordination meetings with memorialized agreements that were revisited over time. Everyone recognized the value of the final product.

*Which Development Team Member took the lead?*

It was a shared effort, although CRA was responsible for much of the work.

*Did the solution to the problems affect the design or implementation of the TOD?*

There were prolonged discussions regarding the location of the station portal and how prominent it should be. The team eventually agreed on the current design with the portal on Hollywood. TrizecHahn paid for the new design and for the installation of signs.

Since the station was under construction when the TOD was proposed, flexibility was limited and changes were expensive. As a result, some changes that could have improved the design had to be dropped.

*Have barriers prevented other TODs from being developed? No*

*How was the project financed?*

The subway was financed by federal, state and local city dollars. The parking structure and theater were paid for by public funds that will be repaid from future revenues. The remainder of the TOD was privately financed by the developer who estimates total project costs of \$455 million (\$355 million net of municipal contributions) and says it was financed with a \$150 million construction loan. (See *Appendix to Chapter 6: Case Studies of 5 TODs in California: Development Feasibility* for additional details on how Hollywood/Highlands was financed)

*Were any public financing measures used to create/facilitate the TOD?*

Bonds to pay for the parking structure and theater were issued.

*To what extent does the TOD provide community services?*

There will be a police substation in the project that will also serve the police patrols for the subway system. The City has first refusal rights to book the theater for up to 10 days annually and at any other time the theater is not in use.

*Has the TOD increased any of the following:*

*Land use mix?* Yes, it provides a first class hotel and ballroom facilities that are lacking in the area now.

*Density?* Yes, and it will spur new development. The area is experiencing some revitalization now and this project is encouraging more. CRA is currently preparing to create an area-wide plan for redevelopment of the surrounding community.

*Employment?* Yes, CRA projected the TOD will generate 1,900 jobs. A portion of these employees, especially those in service-level jobs, is expected to use transit.

*Has the TOD:*

*Increased ridership?* Yes, it is a key location. When completed, the TOD will draw tourists as well as employees, some of whom will be using transit.

*Improved transit service?* Yes, with increasing ridership the line now has six car trains during rush hours. The revitalization of the area, which the TOD is encouraging, is expected to continue adding ridership.

*Improved station aesthetic design?* Yes. At street level, the station was designed as a simple elevator portal set in a landscaped area until a future project was proposed for the site. Construction on the underground station had begun when the TOD was proposed.

*Created a destination/attraction?* Yes. This station provides an excellent example of planning for a special purpose district that will have a regional attraction, particularly for certain special events. Having transit immediately available to the site was one more benefit that the developer could offer in order to win the competition for the Academy Awards location.

One of the remaining issues is how to accommodate tour buses. One proposal is to create a staging area for all tour buses, have tourists use transit to access Universal Studios and other sites, and then return to their tour bus by transit.

*Has the TOD been successful in achieving these goals? How is the project performing?* It is too early to tell.

*What were the Lessons Learned?* It is important to have seasoned construction managers involved in the negotiations and schedule coordination. MTA was represented by a construction manager with significant experience who provided a sense of credibility. He

was able to respond to demands for speeding up station completion by establishing realistic schedules and, further, by pointing out areas where the developer could assist.

There is a need for more flexibility in the design of sites at transit stations. In this case, MTA had started construction with a design that did not lend itself well to the addition of a large structure on street level, even though it is located in a district where this is appropriate.

*What would you do differently?*

Many things were done right and the area will benefit from the experience in general. Most of the problems experienced were typical of a large and complicated project. Other station areas now being designed are quite different from this one, as is appropriate since each one has to fit into its surroundings.

Start design earlier and integrate the design better. The “fast track design while building” caused construction problems.

#### QUESTIONS ABOUT TODs IN GENERAL

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*What is stimulating developer interest in TODs?*

Transit as part of the site invites patronage.

*What are the barriers to TOD?*

A lack of interagency coordination and reluctance to accept higher density around stations are barriers. L.A. is a low-density city and people object to a massive development. The TOD must fit into the fabric of the neighborhood.

There is a lack of good land, and good developers.

*What kinds of information would be useful to reduce barriers to TOD development?*

- ▶ Sharing information between the transit agency and City.
- ▶ Setting clear development goals.
- ▶ Finding out what a community needs and incorporating that need into the design.

*What development incentives or circumstances are most helpful?*

- ▶ Providing property
- ▶ Being willing to be flexible and “think outside the box”
- ▶ Providing public financing

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Work with the neighborhood to address concerns about the environment and traffic by showing how these are being taken care of. Create a development that fits the community.

*Are there other public sector actions that could be taken to encourage TODs?*

Transit agencies could have land banks and offer sites

Public agencies should be partners and advocates for a project. It is important to be a co-developer and willing to use the leverage of the agency or jurisdiction to help advance the project. This is what CRA does.



## **‘NoHo’ (North Hollywood) Arts District, Los Angeles**

Service Frequency:	4 Bus lines with service range from 25 to 40 minutes
Urban or Suburban location:	Urban
Ridership (station, not TOD):	Not available
Developer:	Los Angeles Neighborhood Initiative (LANI)
Contact name:	Joyce Perkins, Executive Director
Phone / email:	213.627.1822 ext 11 / <a href="mailto:joyce@LANI.org">joyce@LANI.org</a>
Contact name:	North Hollywood Community Forum
	Ken Banks, Executive Director
Phone:	818.763.5273
FAX:	818.763.4032
Urban Renewal Agency:	L.A. Community Redevelopment Agency (CRA)
Contact name:	Lillian Burkenheim-Silver, Project Manager
Site Office:	5651 Vineland Ave., North Hollywood
Phone:	818.753.1918
Fax:	818.506.8625
Transit Agency:	L.A. County Metropolitan Transit Authority (MTA)
Contact name:	Ashok Kumar, Ph.D.
Phone / email:	213.922.6911 / <a href="mailto:KumarA@MTA.net">KumarA@MTA.net</a>

### **Overview**

The NoHo bus TOD resulted from a community partnership, with LANI assisting in the formation of a community-based organization that was responsible for planning the improvements. Later, the nonprofit North Hollywood Community Forum was formed to continue promoting projects in the area.

The Community Redevelopment Agency owned the vacant lot that became an art park, and leased the property to the NoHo ‘Recognized Community Organization’ (RCO) for a dollar a year. The art park and surrounding small businesses have created an attractive area that is now a much greater draw for local residents.

The economic development leveraged by the TOD has encouraged businesses to fill previously vacant commercial spaces. Eight new businesses have moved into the immediate vicinity of the art park. One vacant property that was formerly a gas station has become a Starbucks Coffee shop, and other vacant buildings are now used by small businesses. LANI estimates that pedestrian foot traffic in the area has increased significantly, particularly in the evenings.

At least 30 new jobs have been created in the NoHo Arts District. The NoHo project has installed a parking lot across the street from the Arts Park.

### **Project Financing**

Funding for \$100,000 of transit amenities came from a Federal Transit Administration *Livable Communities* grant.

### **Lessons Learned**

The NoHo bus TOD reveals more about community development than transit, and illustrates how one of the greatest powers of TOD is to serve as a catalyst to achieve a community's vision. Key ingredients were:

- ▶ Giving community groups some control over the funds to be used in their neighborhood, promoting ongoing public involvement.
- ▶ LANI contributing seed money, encouraging residents to make decisions as to how the funds would build capacity in the community.

NoHo held up as an example of how a single, well-focused project can have greater visibility than a series of changes along a corridor, and how short-term impacts can stimulate longer-term development in a community.

### **Interview Questions**

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

#### *Original Project:*

The project involved creating an art park from a vacant lot, planting trees, painting a large mural on a building across the street from the park, and adding “pedestrian lighting” (100 watt lights located 15 feet up on the street light poles to light the sidewalks). The restaurant next to the park opened up a sidewalk to serve outdoor diners.

#### *Which team member was the lead on the project?*

Los Angeles Neighborhood Initiative (LANI) assisted with the formation of the North Hollywood Recognized Community Organization (RCO), which was responsible for planning the improvements.

*Size of site:* One-eighth of a mile along Lankershim Blvd. at the intersection with Magnolia Blvd.

#### *Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

The Community Redevelopment Agency (CRA) owns the vacant lot that became an art park. CRA leases the property to the nonprofit for a dollar a year.

*Year project completed:* August 1996

*Subsequent Projects:* The RCO subsequently became the nonprofit North Hollywood Community Forum and continues working to improve the area.

In 1998, the Community Forum improved the parking lot across the street from the Art Park, adding landscaping and lighting and refurbishing the metal sculptures that were originally installed by CRA. CRA owns the property and leases it to the Forum, which, in turn, sublets the lot to a parking company. The income helps the Forum continue operations.

Using Targeted Neighborhood Initiative (TNI) funds, the Community Forum is currently working on the Chandler Outdoor Gallery. The project involves murals and other forms of art on the backside of industrial buildings along the MTA right-of-way and stretches over two miles. The next phase will include a bike path and pedestrian walkway. Another TNI project will develop 7 acres at the west end of North Hollywood Park in partnership with LA For Kids, a private school, City Recreation & Parks, and the YMCA. A third project is the mile long Edison Street Beautification work that is being done with CRA. The Community Forum plans to restore the only remaining Red Line light rail trolley station.

*Size of Site:* The NoHo Community Forum has targeted an area of approximately 2 square miles, with the NoHo Art Park at the center of it.

*Was the TOD built before, during or after the station was built and transit became available?* All projects were developed after transit was available.

*Residential: total number of housing units:* None

*Retail and commercial space:* One vacant property that was originally a gas station has become a Starbuck's Coffee shop and other previously vacant buildings are now used by small businesses.

*Location and type of parking:* A surface parking lot across the street from the Arts Park.

*Number of spaces:* 85 spaces

*Who constructed parking:* The Community Forum

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?*  
No

*Experience: Is there evidence of too much or too little parking being provided?*

As the area attracts more retail patrons, parking is becoming scarcer. The impact of the new subway station three blocks away is also being felt. MTA has just released a Request for Proposal for additional structured parking at the station, which will increase the number of spaces from 825 to 1750.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The zoning allows mixed-uses, including artists in residence living above a workspace or gallery.



There is a façade improvement program that matches costs up to \$25,000. The match is a loan that is forgiven if the property is maintained for five years.

*What problems were encountered in implementing the TOD?*

Potential difficulties associated with moving several neighborhood projects through the local jurisdiction's permit process simultaneously were addressed by LANI before problems arose.

Community Forum projects involve multiple partnerships and multiple funding sources. The coordination process is lengthy and it is easy to get in a position where one agency wants something that slows project negotiations down.

*How were these problems overcome?*

In 1995, LANI arranged a two-day forum during which eight neighborhoods presented their plans to a panel composed of representatives from the City Department of Transportation, MTA, and the Departments of Public Works, Safety, Streets and Lighting, and others. This streamlined the planning process because each RCO did not have to seek separate approvals from each agency. During the forum, concessions were made and compromises reached.

A large contingency fund was established to pay for unexpected costs.

Patience and lots of pre-planning work are required. It is very important to bring all of the agency and organization representatives to the table at the beginning to reduce future problems and misunderstandings.

*Which Development Team Member took the lead?*

LANI was the lead for the original project. The whole team has led the Community Forum projects.

*Did the solution to the problems affect the design or implementation of the TOD?*

Some compromises were made but these did not substantially affect the TOD.

*Have barriers prevented other TODs from being developed? No*

*How was the project financed?*

LANI provided the first \$100,000 for transit amenities. This money was part of a grant provided by FTA for the original project. Other Community Forum projects have been funded through a variety of sources, depending upon the specific improvements.

*To what extent does the TOD provide community services?*

All of the projects are community-driven and are intended to benefit the community.

*Has the TOD increased any of the following:*

*Land use mix?* The many physical improvements to the area have spurred economic development and encouraged businesses to fill formerly vacant commercial spaces.



*Density?* There are more pedestrians on the street, particularly in the evening, when foot traffic has increased by 300%.

*Employment?* At least 30 new jobs have been created in the NoHo Arts District.

*Has the TOD:*

*Increased ridership?* Yes, by drawing more people to the area.

*Improved transit service?* No, the bus service remains the same.

*Improved station aesthetic design?* Yes, the bus stop at the Art Park is far more attractive.

*Created a destination/attraction?*

Yes, the Art Park and surrounding small businesses have become a much greater draw for local residents. One of the goals of the Community Forum is to enhance the corridor and make it a destination.

*Has the TOD been successful in achieving these goals? How is the project performing?*

The retail space has leased up, where before there were significant vacancies, and there are far more people now on the street; these are strong measures of success. Eight new businesses, generally located in previously vacant facilities, have moved to the immediate vicinity of the park.

*What were the Lessons Learned?*

Giving community groups some control over the funds to be used in their neighborhood will create ongoing involvement in the process of improving their environment. LANI brought seed money, encouraged residents to make decisions as to how the funds would be spent, and built “social capital” in the community.

A single, focused project (e.g., the Art Park) can have greater visibility than a series of smaller changes along a corridor, and the impact can stimulate more development.

*What would you do differently?*

LANI is always looking for ways to improve. The planning process has been evaluated and modified twice in the last five years.

LANI is currently undergoing an independent assessment to measure the impact of the LANI improvements on crime, business attraction/retention, etc. The California Endowment is funding the assessment.

## QUESTIONS ABOUT TODs IN GENERAL

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*



*What are the barriers to TOD?*

Focusing on moving traffic through the city as efficiently as possible does not give sufficient attention to the needs of pedestrians who must cross busy streets within their neighborhoods.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Provide more funding to allow neighborhoods to improve the quality of life for their residents.

*Are there other public sector actions that could be taken to encourage TODs?*

Increase incentives to encourage developers to include transit amenities that will improve the environment for pedestrians, including wider sidewalks.



## **Pacific Court, Long Beach**

Urban or Suburban location:	Urban
Ridership (station, not TOD):	NA
Developer:	The Janss Company (sold project in 2000)
Contact name:	Steven Phillips
Phone:	310.393.0015
New Owner:	Meruelo Enterprises
Contact name:	Mark Todler
Phone:	562.862.4360
Jurisdiction:	City of Long Beach
Contact name:	Gary Felgemaker, Community Planning Manager
Phone:	562.570.6894
Contact name:	Ed Norris, Traffic & Transportation
Phone:	562.570.5209
FAX:	562.570.7161
Urban Renewal Agency:	Long Beach Redevelopment Agency
Contact name:	Robert ZurSchmiede
Phone / email:	562.570.6615 / <a href="mailto:rozursc@ci.long-beach.ca.us">rozursc@ci.long-beach.ca.us</a>
Transit Agency:	L.A. County Metropolitan Transit Authority (MTA)
Contact name:	Ashok Kumar, Ph.D.
Phone / email:	213.922.6911 / <a href="mailto:kumara@MTA.net">kumara@MTA.net</a>

### **Overview**

Pacific Court is a heavily subsidized mixed-use TOD put together by the Long Beach Redevelopment Agency. The 2.1-acre project is located in downtown Long Beach near the western terminus of MTA's "Blue Line" light rail.

The residential component includes a mix of affordable and market rate apartments (142) above 96,000 square feet of retail including a 16-plex-movie theatre. Smaller shops ring an open-air, interior courtyard.

### **Project Financing**

The Redevelopment Agency assembled the land for the project and purchased and leased the property to Janss. It also provided short term gap financing to facilitate construction, which was completed in December 1992 (\$25 million in Multifamily Housing

Bonds, \$7 million of which were tax exempt, and \$13.6 million in Community Facility District Bonds issued by the City to be repaid from project revenues).

The TOD increased the land use mix and density in the area and added 300 jobs in the short term. Given an increasing retail vacancy rate in the project, it is unclear how many of these jobs still exist.

### **Parking**

The project includes 400 parking spaces, 263 for the public and 167 for residents. Parking for the project is fairly conventional – approximately one space per bedroom for residences and 5 spaces per 1000 square feet of retail.

Through a variance, guest parking was reduced to 3 spaces for every 10 units because of access to transit. According to surveys, 10% of Pacific Court's residents use transit. An MTA Blue Line light rail station is within a block.

### **Market Performance**

The mix of affordable and market rate housing has proven to be problematic. After July 2001, all residential units will be market rate.

Design problems and limited visibility between the retail shops and the theater have also hurt the performance of the retail portion of the project. Retailers say the design does not encourage pedestrians to view the shops on the way to the theater, and as a result, retail vacancies have been high. In addition, the theater itself is no longer "state of the art" and is drawing fewer patrons.

According to some observers, the high level of retail vacancies may have helped push the project into foreclosure. In 1993 the full cost of the project was listed at \$53 million. The Janss Company experienced financial difficulties with Pacific Court and other projects that culminated in bankruptcy. After foreclosure and emerging from bankruptcy, Janss sold the project for \$13.5 million.

### **Interview Questions**

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

Long Beach Redevelopment Agency

*Size of site:* 2.1 acres

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

Yes. The Redevelopment Agency assembled the land, then purchased and leased the property to Janss. It also provided short term gap financing to facilitate construction. Sharing in rents and parking revenues will repay financing.

*Year project completed:* December 1992

*Was the TOD built before, during or after the station was built and transit became available?* After

<i>Residential: total number of housing units:</i>	142 apartments above retail
<i>Housing types &amp; range of unit sizes:</i>	87 one bedroom; and 55 two bedroom apartments

*Affordable to median income households?*

Some of the units were affordable under the original owner. After July 2001, the project will be entirely market rate.

*Retail and commercial space:*

96,000 square feet, including a 16-plex movie theater. Smaller shops ring an open-air, interior courtyard.

*Location and type of parking?* Underground on-site

*Number of spaces?* 400 total, 263 for public and 167 for residents

*What is the standard parking ratio for the area?*

Residential:	1 space / studio apt.; 2 spaces / 1+ Bedroom
	Guest parking 3 spaces / 10 units.
Retail:	5 spaces / 1,000 square feet

*Does the jurisdiction have a separate parking requirement for TODs?*

Not at the time this project was built. Pacific Court was allowed to eliminate the guest parking through a variance, and the retail parking requirement was cut by two-thirds due to transit availability.

*Experience: Is there evidence of too much or too little parking being provided?*

It appears to be sufficient at this time.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The Long Beach Redevelopment Agency was willing to provide significant public subsidies through writing down the cost of land acquisition and the issuance of tax-exempt financing.

*What problems were encountered in implementing the TOD?*

The Janss Company had financial difficulties that culminated in bankruptcy. The company was involved in several financially complex projects and had trouble with some of them.

*How was the project financed?*

\$25 million in Multifamily Housing Bonds (\$7 million of which were tax exempt), and \$13.625 million in Community Facility District Bonds (issued by the City) to be repaid from revenues.

The full cost of the project was listed at \$53 million in 1993. The high level of retail vacancies probably helped push the project into foreclosure. After foreclosure and emerging from bankruptcy, the project sold for \$13.5 million. The new owners have determined that they are no longer obligated to provide a portion of the housing at affordable rates and these leases will not be renewed. The Redevelopment Agency has negotiated relocation expenses for the tenants who will be displaced. The entire project will become market rate after July 2001.

*Has the TOD increased any of the following:*

*Land use mix?* Yes, through the mix of retail, theater and apartments.

*Density?* Yes, by adding 142 apartments.

*Employment?* The project was originally projected to add 350 construction jobs and 300 permanent jobs to the area. Given an increasing retail vacancy rate, it is unclear how many jobs still exist.

*Has the TOD:*

*Increased ridership?* According to a 1994 survey, 10% of the residents use transit.

*Improved transit service?* Transit service was not affected.

*Improved station aesthetic design?* There is no station at the site. The nearest station is a full block to the south.

*Created a destination/attraction?* The theater is an attraction, however, it has become an attraction for “gangs” whose presence deters prospective patrons. The project has not attracted the clientele needed to make it a success.

*Has the TOD been successful in achieving these goals? How is the project performing?*

The residential portion is performing fairly well. The high level of retail vacancies probably helped push the project into foreclosure.

Retailers say the design does not encourage pedestrians to view the shops on the way to the theater. Even with the presence of the theater, there are commercial tenant problems. The theater itself is no longer “state of the art” and is drawing few patrons.

This area is struggling to overcome a negative image that pervades this portion of downtown Long Beach. There are few permanent residents, and even fewer of them with disposable income sufficient to support the retail businesses.

*What were the Lessons Learned?*

The mix of low-income subsidized and market rate rentals in a single project was not successful. Those paying full cost for the same housing did not stay.



*What would you do differently?*

Improve the design; it was a low budget project from the beginning and that has contributed to a less successful project than might otherwise have resulted.

## San Diego Area:

### American Plaza, San Diego

Service Frequency:	Orange and Blue light rail lines, one at 7.5 minute and the other at 15-minute headways during peak hours. The site also served by 21 bus routes.
Urban or Suburban location:	Urban
Transit Ridership (station, not TOD):	7,000 'ons' and 'offs' daily
Original Developer:	Starboard Development Corporation (No longer in business)
Current Owner:	Shimizu Land Corporation
Jurisdiction:	San Diego
Contact name:	Miriam Kirshner, City Planning Liaison to MTDB
Phone / email:	619.557.4585 / <a href="mailto:Mkirshner@mtdb.sdmts.com">Mkirshner@mtdb.sdmts.com</a>
Urban Renewal Agency:	Centre City Development Corporation (CCDC)
Contact name:	Pam Hamilton
Phone:	619.533.7114
Transit Agency:	Metropolitan Transit Development Board (MTDB)
Contact name:	Jack Limber, General Counsel & Deputy General Manager
Phone:	619.231.1466
Contact name:	Chris Kluth, Transportation Planner
Phone:	619.557.4556

### Overview

This two-block TOD includes one of two commercial towers in San Diego that are distinguished by having a light rail stop built directly into their structures.

Starboard Development Corporation financed the office building and nearly four-fifths of the \$5.2 million capital costs for the station. The developer spent \$3.78 million to temporarily relocate light rail stations, construct the new station, and connect the C Street light rail alignment to the Broadway alignment. MTDB contributed \$1.2 million to the project and the City/ Redevelopment Agency vacated and contributed the street between the two blocks. All other costs, including on and off-site utility and other public improvement costs, were borne by the developer.



Project planning began in 1987, and the structure was built in conjunction with the new Broadway-Kettner station. To meet MTDB's construction schedule, the station had to be built by January 1, 1992. The developer beat the deadline by six weeks, completing the station on November 14, 1991.

The 34-story tower opened in 1992 and is the tallest building in the city. The 555,000 square foot "vertical TOD" includes offices, a specialty retail galleria/food court (17,000 square feet), and the San Diego Museum of Contemporary Art (10,000 square feet).

Shortly after construction began, the primary lender (a savings and loan and prospective anchor tenant) collapsed and new financing had to be found. Meanwhile, the project schedule was being driven by the need to complete the light rail track in time to connect to new service on the other side of the site. While construction continued, financial arrangements were made that resulted in a Japanese bank buying out the original S&L and supporting the project.

### **Parking and Transit**

America Plaza has 1,250 parking spaces in four levels under the building. The parking ratio of 2.2 spaces per 1,000 square feet of office is transit-friendly, however adjacent surface parking is available.

No ridership estimates are available for the project, however approximately 25% of all downtown workers use rail transit during peak commuting hours. The ground floor retail, 33 floors of office space, and the museum all contribute to transit patronage. In addition, the outstanding station design provides transit patrons with a unique waiting area, and has become an attractive destination/attraction.

### **Lessons Learned**

The America Plaza project presented major challenges regarding schedule deadlines and overcoming the bankruptcy of the lender. According to MTDB, success resulted from:

- ▶ Choosing the best team to develop a project concept, rather than letting the concept drive the selection.
- ▶ Setting a "fair" project budget and schedule with allowance for changes.
- ▶ Controlling the schedule through agreements.
- ▶ Having an "ironclad" delivery date.

### **Interview Questions**

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?* MTDB with Starboard Development

*Size of site:* Two city blocks



*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

Centre City Development Corporation (CCDC) prepared a Disposition and Development Agreement (DDA) for the site. The DDA notes that Starboard provided all funds necessary for CCDC to acquire privately owned portions of the site not already owned by the Developer. In consideration of Starboard's expenditure of \$3.78 million to temporarily relocate the C Street trolley stations, construct the new trolley station, and connect the C Street and Broadway alignments, the DDA proposed that MTDB contribute \$1.2 million and the City / Redevelopment Agency vacate and contribute C Street between India Street and Kettner Boulevard. Starboard, in turn, dedicated to MTDB a condominium parcel of track way and airspace.

*Year project completed:*

Planning began in 1987 and the building opened in 1992.

*Was the TOD built before, during or after the station was built and transit became available?*

The structure was built in conjunction with the new Broadway-Kettner station. Under the DDA, the developers were to construct the trolley station in accordance with MTDB-approved plans and specifications, to undertake such offsite track improvement work as necessary to make the station functional, and to maintain a temporary station during construction. The station had to be completed by January 1, 1992, and the developer beat the deadline by six weeks, finishing the station on November 14, 1991.

*Residential: total number of housing units:* None

*Retail and commercial space:* 34-story office tower (555,630 square feet) mixed-use development with specialty retail galleria/food court (17,000 square feet), the San Diego Museum of Contemporary Art (10,000 square feet), and outdoor plazas.

*Location and type of parking:*

Underground, beneath the building and on the second block as well.

*Number of spaces:* 1,250 in four levels. The bank financing for the project and office space marketing concerns drove the amount of parking.

*Who constructed parking?* Developer

*Does the jurisdiction have a separate parking requirement for TODs?* No

*Are any creative parking strategies (e.g. shared parking, valet parking, etc.) being tried?*  
No

*Experience: Is there evidence of too much or too little parking being provided?*

When the second block that is currently being used for additional parking is developed, the answer to this question will become clear. Generally, downtown developers appear to build an excess of parking as a way to market the office space of their buildings.



*Were any local policies and/or programs in place to assist in implementation of the TOD?*  
The primary assistance was CCDC's receptiveness to incorporating transit into the project.

*What problems were encountered in implementing the TOD?*

Shortly after construction began, the savings and loan anchor tenant collapsed and new financing had to be found. Meanwhile, the project schedule was being driven by the need to complete the trolley track in time for the opening of a new line on the other side of the site, and connecting the two lines.

*How were these problems overcome?*

While construction continued, financial arrangements were made that resulted in a Japanese bank buying out the original S&L and supporting the project.

*Which Development Team Member took the lead?*

Starboard Development Corporation

*Did the solution to the problems affect the design or implementation of the TOD?* No

*Have barriers prevented other TODs from being developed?* No

*How was the project financed?*

The developer, Starboard Development Corporation, was able to fund nearly four-fifths of the \$5.2 million capital costs for the station.

*Were any public financing measures used to create/facilitate the TOD?*

The \$1.2 million contribution by MTDB and the vacated portion of C Street comprise the only public participation in the project. All other costs, including on- and off-site utility and other public improvement costs, were borne by the Developer.

*To what extent does the TOD provide community services?*

The museum is the only community service provided.

*Has the TOD increased any of the following:*

Land use mix?	Yes
Density?	Yes. The building is the tallest in the City.
Employment?	Yes

*Has the TOD:*

*Increased ridership?*

Yes. The ground floor retail, 33 floors of office space, and the museum all contribute to increasing transit patronage.

*Improved transit service?*

Yes. The station is of very high quality and creates a positive image that makes using transit a desirable alternative.

*Improved station aesthetic design?*

Yes. The outstanding station design provides transit patrons with a unique waiting space.

*Created a destination/attraction?*

Yes. The trolley and the American Plaza were decisive factors in the redevelopment of the Broadway-Kettner station area. Approximately 25% of downtown workers use rail transit during peak commuting hours. The trolley has a strong presence and has been an important factor in revitalizing the city core. American Plaza is one of two transit-based commercial towers that are distinguished by having a trolley stop built directly into their structures. Located two blocks from San Diego's waterfront, the 34-story building is particularly striking in its station design and redevelopment role.

*Has the TOD been successful in achieving these goals? How is the project performing?*

Yes. The project is performing well and is fully leased. American Plaza is a good example of joint development at the higher end of the land use intensity spectrum.

*What were the Lessons Learned?*

- ▶ The value of working closely with the redevelopment agency to coordinate the land uses at the start of the process. CCDC is very receptive to incorporating transit and assuring good pedestrian access.
- ▶ Choose the best team to develop a project concept – don't let the concept drive the selection.
- ▶ Set fair project budgets and schedules and allow for changes.
- ▶ Control the schedule through agreements.

*What else would you like to add?*

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

Before getting mired in the details of the project, it is important to be sure that decision-makers understand and agree on the concept of transit-oriented development.

*What are the barriers to TOD?*

The same as for other developments: money and time.

*What kinds of information would be useful to reduce barriers to TOD development?*

Government could move faster, thus reducing the barrier of time.

*What development incentives or circumstances are most helpful?*

Priority approval reviews, again addressing the barrier of time.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Expedite the review process.

Transit agencies are one member of a team that must include the City and Redevelopment Agency in a cooperative effort.

*Are there other public sector actions that could be taken to encourage TODs?*

Allow higher density zoning on appropriate sites.

## Rio Vista West, San Diego

Service Frequency:	15 minute headways
Urban or Suburban location:	Suburban
Ridership (station, not TOD):	451 daily 'ons' and 'offs'. Station is near the end of the Blue Line light rail line. When it connects to the Orange Line light rail in 2004, and when the Rio Vista development is completed, service frequency will be increased and ridership will be higher.
Developer:	CalMat Properties
Contact name:	Patty Schreibman
Phone:	619.298.5800
Jurisdiction:	San Diego Planning
Contact name:	Nancy Bragado, Senior Planner
Phone / email:	619.533.4549 / <a href="mailto:njs@sdcity.sannet.gov">njs@sdcity.sannet.gov</a>
Contact name:	Marian Kirshner, City Planning Liaison to MTDB
Phone / email:	619.557.4585 / <a href="mailto:MKirshner@mtdb.sdmts.com">MKirshner@mtdb.sdmts.com</a>
Transit Agency:	Metropolitan Transit Development Board (MTDB)
Contact name:	Chris Kluth, Transportation Planner
Phone:	619.557.4556
Additional Contact:	Paul Zykofsky, Local Government Commission
Phone:	916.448.1198

### Overview

Rio Vista is a mixed-use TOD being built in phases on 95 acres around the Rio Vista light rail station, owned by CalMat. The City of San Diego's 1985 Mission Valley Plan designated multiple urban nodes and envisions higher density for this particular area.

Rio Vista's first phase was commercial development, resulting in a fairly standard shopping center. The first residential development along the light rail line was located one-quarter mile from the station. These units are in three-story structures at blended densities of 33 units per acre, well above densities in the surrounding suburbs, which average 4 to 5 units per acre.

The second residential phase of 240 condominium units broke ground in quick sequence. Construction is now underway on the final residential portion immediately next to the station. The 1,000-unit project at a density of approximately 70 units per acre is estimated for completion in 2002.





The TOD includes 30,000 to 50,000 square feet of small office and neighborhood retail. There is minimal street parking near the office/retail uses, and much of the parking is underground. The area adjacent to the station includes reduced parking requirements because of transit.

### **TOD Policies and Programs**

In 1990, MTDB adopted a policy on land use planning coordination that calls for working closely with other agencies on pedestrian- and transit-oriented developments. The City of San Diego's TOD design guidelines were adopted in 1992 and incorporated into official policies and regulations. The City encouraged the developer to follow the guidelines and received a design that met most of the objectives of the City.

San Diego does not provide density bonuses for TOD, but it does zone for higher densities around transit stations. The City zoning code allows mixed-use in most commercial areas.

No subsidies were involved in this TOD; the project was privately financed and market driven.

### **Lessons Learned**

Rio Vista is an important example of the challenges and opportunities with a phased TOD project. Early phases of the project included a KMART and were criticized by some for being too automobile-oriented. Conversely, the high-density residential portion holds the promise of being one of the most transit-friendly suburban projects in California. The TOD has pushed densities in the area over 10 fold from 4 to 5 upwards to 70 units per acre.

Major lessons from this project include:

- ▶ Having a TOD-friendly master plan in place can facilitate development over time.
- ▶ The value of having a motivated developer who is committed to the project for the long-term.
- ▶ The importance of being persistent (e.g., working with city engineers to negotiate design variances).

### **Interview Questions**

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?* Developer

*Size of site:* 95 acres surrounding the station. Originally an industrial site, the developer owned all of the land.

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?* No

*Year project completed:* Estimated completion in 2002.

The first phase was commercial development, resulting in a fairly standard shopping center. Residential development along the trolley line sited the first homes one-quarter mile from the station. These units are in three-story structures at blended densities of 33 units per acre, well above densities in the surrounding suburbs, which average 4 to 5 units per acre. The second residential phase of 240 condominium units broke ground in quick sequence. Construction is now underway on the final residential portion which will be at a density of approximately 70 units per acre.

*Was the TOD built before, during or after the station was built and transit became available?*

The project was initiated after the station design was finalized, but prior to light rail becoming available.

*Residential: total number of housing units*

Originally planned to be 1,000 units including 240 apartments and 240 condos. The total at build-out will be approximately 1,700 units.

*Affordable to median income households?* No

*Retail and commercial space:*

30,000 to 50,000 square feet of small office and neighborhood retail

*Location and type of parking?*

There is minimal street parking in the mixed-use portion of the project. The remainder of the parking is underground.

*Number of spaces?* 970 spaces in the mixed-use portion of the project.

*Who constructed parking?* Developer

*Does the jurisdiction have a separate parking requirement for TODs?*

Yes, adjacent to transit stations there is a reduced parking ratio.

*Are any creative parking strategies (e.g., shared parking, valet parking, etc.) being tried?*

Shared parking is allowed citywide, subject to approval by the City Engineer.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*

The 1985 Mission Valley Plan designated urban nodes and supports higher density in this area.

The City of San Diego adopted TOD design guidelines in 1992, which have been incorporated into official policies and regulations. The City encouraged the developer to follow the guidelines, and the response was a design that met most of the City's objectives (some compromises were reached).

San Diego does not provide density bonuses, but does zone for higher densities around transit stations. The City zoning code allows mixed-use in most commercial areas. It also allows a Floor Area Ratio (FAR) bonus for projects that mix both commercial and residential uses. Virtually all of the commercial zones allow residential development as part of a mixed-use project, with densities in the 30-unit per acre range in most zones in addition to the commercial density. This means that a developer could take advantage of the mixed-use opportunity and get a commercial FAR bonus, a residential FAR bonus, and about 30 du/ac.

In 1990, MTDB adopted a policy on land use planning coordination that calls for working closely with agencies on pedestrian- and transit-oriented developments.

*What problems were encountered in implementing the TOD?*

City engineering staff was reluctant to approve narrow streets.

*How were these problems overcome?*

Main Street was designated as a private street to allow different standards.

*Which Development Team Member took the lead?* The City

*Did the solution to the problems affect the design or implementation of the TOD?* No

*Have barriers prevented other TODs from being developed?* No

*How was the project financed?* Privately

*Were any public financing measures used to create/facilitate the TOD?*

No subsidies were involved; the project was privately financed and market driven.

*Has the TOD increased any of the following:*

*Land use mix?* Yes

*Density?* Yes

*Employment?* Yes. The office and retail uses have increased the number of jobs in the area.

*Has the TOD:*

*Increased ridership?*

Yes, by increasing the residential density near the station.

*Improved transit service?* Yes

*Improved station aesthetic design?* Yes

*Created a destination/attraction?* No

*Has the TOD been successful? How is the project performing?*

Project is not yet complete.

*What were the Lessons Learned?*

The importance of being persistent (e.g., working with engineering staff to modify standards).

The value of a motivated developer who is committed to the project.

*What would you do differently?*

Improve communication and coordination with City technical staff.

## **Uptown District, San Diego**

Service Frequency:	15 to 30 minutes
Urban or Suburban location:	Urban
Ridership (station, not TOD):	No single station. District located on a major transit corridor served by 4 or 5 routes and several bus stops.
Developer:	Oliver McMillin Company / Oldmark & Thelan
Jurisdiction:	San Diego
Contact name:	John Wilhoit, Long-Range Planner
email:	<a href="mailto:jjw@sdcity.sannet.gov">jjw@sdcity.sannet.gov</a>
Contact name:	Miriam Kirshner, City Planning/Liaison to MTDB
Phone / email:	619.557.4585 / <a href="mailto:mkirshner@mtdb.sdmtds.com">mkirshner@mtdb.sdmtds.com</a>
Transit Agency:	Metropolitan Transit Development Board (MTDB)
Contact name:	Dave Schumacher, Transportation Planner
Phone:	619.231.1466
Additional Contacts:	Paul Zykofsky, Local Government Council 916.448.1198 / <a href="mailto:pyzkofsky@lgc.org">pyzkofsky@lgc.org</a>
	Michael Stepner, Dean, New School of Architecture & Design 619.235.4100 / <a href="mailto:stepner1@packbell.net">stepner1@packbell.net</a>
	Bill Liben, Resident of Uptown since 1992 619.235.5214

### **Overview**

The Uptown district is a 14-acre mixed-use bus TOD put together under the leadership of the City of San Diego. For this project, San Diego wanted to showcase a mixed-use development. There was no public opposition to the project since it required relatively little change to the community (the site was a former Sears store in an existing mixed-use community).

The City issued a request for proposal for the project in 1987, and the project was completed in 1989. The residential component has 320 units at an average density of 43 units per net acre; 145,000 square feet of retail and commercial space include a 42,500 square foot supermarket.



### **TOD Policies and Programs**

In 1990, MTDB adopted a policy on land use planning coordination that requires working closely with other agencies regarding pedestrian and transit-oriented developments.

The City of San Diego adopted TOD design guidelines in 1992 (after project completion), which were incorporated into official policies and regulations.

San Diego does not provide density bonuses, but does zone for higher densities around transit stations. City zoning code allows mixed uses in most commercial areas.

Transit ridership in the area was strong before the project was built, and it increased after project construction (requiring additional service). Many residents walk to nearby bus stops.

The Uptown project was privately financed and has been successful in creating a community where it is convenient to walk to shopping and transit service is excellent.

### **Parking**

The project is parked conventionally; no special parking reductions were implemented to account for the presence of transit. The parking ratio for commercial is 1 space per 285 square feet and 2.25 spaces per unit for the residential. The developer chose to construct more spaces than the City recommended in its solicitation.

Residential and supermarket parking is underground, and street level spaces are available for retail shoppers. No parking is provided specifically for transit riders.

### **Lessons Learned**

With strong city leadership, a bus TOD became an important community asset. Like other TODs, the residential portion of the TOD is more successful than the retail.

For this project, public land ownership was important, as the City could wait for the right design to be proposed before allowing development.

Uptown is a wonderful example of how to accommodate the needs of the automobile *and* create a well-designed, pedestrian-friendly mixed-use TOD.



## Interview Questions

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*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*Which team member was the lead on the project?*

The City owned the site and took the lead to find a developer. San Diego wanted to showcase a mixed-use development.

*Size of site:* 14 acres; a former Sears store, it was purchased by the City for a library.

*Did the jurisdiction offer incentives to facilitate the implementation of the TOD?*

The only incentive offered by the City was a suggestion that the developer would be free of obligations if the supermarket failed.

*Year project completed:* 1989

*Was the TOD built before, during, or after the station was built and transit became available?*

Transit was already available but the number of routes was increased after development was completed.

*Residential: total number of housing units:*

320 units; average density of 43 units per net acre.

*Housing types & range of unit sizes:*

20 townhouses, 290 flats, and 10 lofts

*Range of sale or rental prices:*

Two bedroom unit was \$135,000 in 1992; rose to \$240,000 in 2001.

*Affordable to median income households?* No.

*Retail/commercial/office space:*

145,000 square feet including a 42,500 square foot supermarket and 28,500 square feet of "limited commercial" that is generally used for second floor offices, a restaurant, and retail uses.

*Location and type of parking:*

Residential and supermarket parking is underground. Street level spaces are available for retail shoppers. No parking is provided specifically for transit riders. Residents walk to the bus stops. There is no reason for people living outside the district to drive in for bus service.

*Number of spaces:* 1,068



*Who constructed parking?* Developer  
*What is the standard parking ratio for the area?*  
Commercial – 1 per 250 square feet  
Residential – 2.25 per unit

*Does the jurisdiction have a separate parking requirement for TODs?*  
Not at the time of this development.

*What was the method used to develop and support a TOD parking ratio?* It was negotiated between the parties.

*Are any creative parking strategies being tried?*  
Shared parking is allowed citywide, subject to approval by the City Engineer.

*Experience: Is there evidence of too much or too little parking being provided?* Parking is not a problem. There are generally spaces available, especially in the underground parking lots. Two bedroom units are assigned two spaces and some households rent out their extra space. Visitors either park on the street or in an extra space assigned to the resident they are visiting.

*Were any local policies and/or programs in place to assist in implementation of the TOD?*  
San Diego does not provide density bonuses, but does zone for higher densities around transit stations. City zoning code allows mixed-use in most commercial areas.

*What problems were encountered in implementing the TOD?*  
Since the site was a former Sears store and the surrounding area includes a lot of mixed-uses, there was no public opposition and there were no memorable problems. There were many suggestions for uses; mixed-use evolved out of the discussion that formed the basis for the City's Request for Proposal.

*How was the project financed?* Privately financed.

*Were any public financing measures used to create/facilitate the TOD?* No

*To what extent does the TOD provide community services?*  
There is a community meeting room and a small public park in the residential portion. Vermont Street Bridge, a public art project, reconnected University Heights and Uptown, which had been separated for many years.

*Has the TOD increased any of the following:*

*Land use mix?*

Within the TOD the land use mix was increased. It did not affect the surrounding area. Uptown served as a catalyst that accelerated redevelopment and infill development in the surrounding area.

*Density?*

The area was already one of higher density, which made it easier to bring the project in.

*Employment?*

Jobs were created at stores within the TOD.

*Has the TOD:*

*Increased ridership?* Ridership was strong before the project was built, but residents from Uptown have increased ridership, and additional service was added to serve them.

*Improved transit service?* Yes, the number of routes was increased after the development was completed.

*Improved station aesthetic design?* There are no stations, just bus stops along the transit corridor.

*Created a destination/attraction?* Only for those researching TOD who all want to visit project.

*Has the TOD been successful in achieving these goals? How is the project performing?*

It has been successful in creating a community where it is convenient to walk to shopping and transit service is excellent.

*What were the Lessons Learned?*

- ▶ The City can set higher standards and find developers who are willing to work with them to produce a project that becomes a model.
- ▶ When done well, TOD can be accepted even though it is more intensely developed. Uptown has become an example that other communities point to show what they are willing to accept.
- ▶ The residential portion of the TOD is more successful than the retail.
- ▶ The City completed economic studies that indicated the amount of retail that could be supported. The developer obtained Council approval for a larger number of square feet. It appears that the capacity of the area has been exceeded at this time but in the future the retail will probably fill up.
- ▶ There is a high value in public land ownership because the City could wait for the right design to be proposed.

QUESTIONS ABOUT TOD IN GENERAL

*(Please note: the statements below are those of the participants who were interviewed for this study, and do not necessarily express the views of the State of California, other public agencies, or the consultants.)*

*What is stimulating developer interest in TODs?*

- ▶ The diminishing supply of land on which to develop single-use projects.
- ▶ The rising cost of land. The “nearly incessant” discussions by our decision-makers of mixed-use smart growth. Local developers appear to understand that they will need to broaden their expertise to include more complex development products if they are to be successful in this area.

*What are the barriers to TOD?*

- ▶ Emphasis of lending institutions on single use projects rather than mixed-use.
- ▶ Some community resistance to higher density.
- ▶ Some members of the community fear housing for the poor.
- ▶ Market forces beyond our control, such as the need for, and cost of, providing parking.
- ▶ The market is not always supportive of TOD.

*What kinds of information would be useful to reduce barriers to TOD development?*

- ▶ Many agencies are currently doing outreach to involve the community in planning and to provide information on the positive aspects of density.
- ▶ Examples of successful TODs that can be used as a model to help develop trust in the community.
- ▶ Models of TOD can convince bankers to invest in mixed-use projects.

*What development incentives or circumstances are most helpful?*

- ▶ Allowing higher densities.
- ▶ Public financing to simplify funding projects.
- ▶ Political support is a key element to successful TOD. In the case of San Diego, the City Council, the Regional Agency and the Transit Agency are all very supportive.

When the City has provided clear design standards, the results are generally better. It is helpful to the developer to have a clear sense of what the City wants, especially if the design standards have been put through some level of community review. It is important for the City to have a knowledgeable and committed staff member managing the project through the approval process, dealing with those technical staff who may be reluctant to accept lower parking ratios or alternative street standards.

*How can transit agencies and the California Department of Transportation encourage more TODs?*

Cooperation and the sharing of information between City land use and transit staff.

*Are there other public sector actions that could be taken to encourage TODs?*

- ▶ Get the process in line with the goal by ensuring that the criteria used within the bureaucracy to review projects is supportive of TOD.
- ▶ Get support from the Council of Governments and their assistance in distributing information and guidelines to jurisdictions.

## Appendix II to Chapter 5: INDEX & PLACE<sup>3</sup>S planning tools



**INDEX**

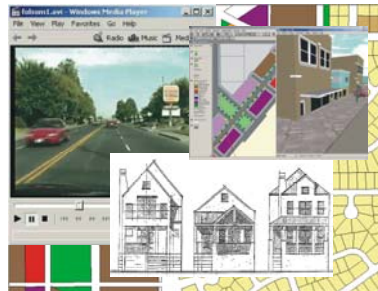
### Planning Support Software

INDEX is a GIS-based planning support system that uses indicators to measure the performance of regional, community, and neighborhood plans. It is available in both standard and custom versions to help planners and citizens: 1) create plans through issues identification, alternatives analysis, and goal-setting; 2) implement plans by evaluating proposed development consistency with adopted goals; and 3) achieve plans by periodically measuring cumulative progress toward goals. The software's scope includes land-use, transportation, and environmental resources, and is capable of single point in time impact analyses or dynamic forecast analyses. INDEX is distinguished by its spatially-referenced multimodal travel network that provides genuinely integrated land-use/transportation evaluations.



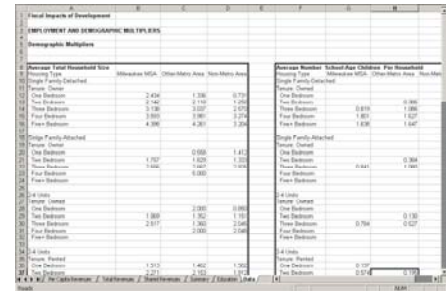
#### Design

Create scenarios interactively with stakeholders



#### Visualize

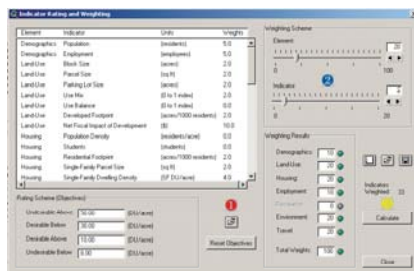
View outcomes with 3D modeling, video, and other media.



#### Analyze

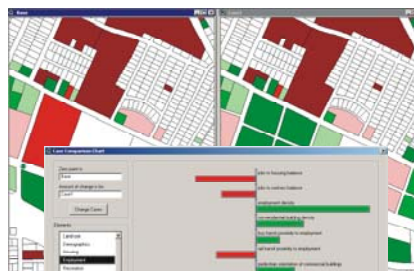
Perform specialized technical analyses, e.g. air quality, stormwater, fiscal.

After plan preparation INDEX converts to an implementation evaluation tool that examines the acceptability of proposed development projects. Proposals can be examined in two ways: the magnitude of change in existing conditions that would be created; and the degree of consistency with adopted plan goals. Detailed impact evaluations can also be prepared for travel, air quality, storm water, fiscal, and developer financial returns.



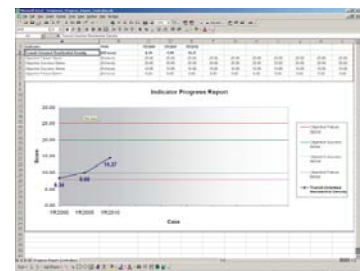
#### Score

Evaluate scenarios and development impacts with stakeholder-selected and weighted indicators.



#### Compare

Identify trade-offs between alternatives and gauge acceptability.



#### Periodic Report Card

Gauge cumulative progress toward plan goals

The last stage of INDEX application is periodic measurement of progress toward plan goals. Benchmark measurements can be updated annually or every few years, and cumulative progress toward goals reported. In this way, stakeholders can be assured of accountability over the life of a plan; and equally important, the need for mid-course adjustments can readily be seen and acted upon.



**INDEX<sup>®</sup>**

## Frequently Asked Questions



### What is INDEX?

INDEX is a GIS-based planning support system that uses indicators to measure the conditions and performance of communities and their plans. It is used to benchmark existing conditions, evaluate alternative courses of action, and monitor change over time. The software is marketed by Criterion Planners/Engineers of Portland, Oregon, and is available in standardized PlanBuilder and TransitNeighbor versions, custom versions developed for specific communities, or through modeling services provided by Criterion.

### What is its history of use?

INDEX is one of the most widely distributed planning tools in the country, with over 80 organizations in 25 states equipped with the software since 1994. Approximately half of the users are city and county planning departments, a quarter are regional planning agencies, and the balance is divided among federal agencies, advocacy groups, and academic institutions.

### What indicators does it use?

Criterion has a library of more than 100 indicators available for community-specific customization. Their topical scope ranges across land-use, transportation, housing, employment, infrastructure, and the natural environment. New indicators are often designed in collaboration with local stakeholders during customizations. PlanBuilder and TransitNeighbor come with standard sets of 58 indicators.

### What are its geographic and temporal scopes?

INDEX can be applied to single neighborhoods, entire communities, and multi-jurisdiction regions. Its measurements can be calculated at either the parcel level or a larger user-defined area level, such as census blocks or traffic analysis zones. It can execute static analyses of a single point in time or dynamic analyses of spatial growth forecasts of up to 20 years.

### What are its hardware requirements?

Minimum hardware requirements generally include a 450 MHz PC with 128 MB of RAM, a 17-inch monitor capable of 800 x 600 resolution with 32-bit color, and at least 25 MB of hard disk space for installation; up to 1.5 GB may be needed for applications.

### What are its software requirements?

INDEX is built as an ArcView or a MapObjects-based application using any Windows operating system. ArcView 3.2a versions of INDEX also require ArcView Network Analyst 1.0b, and in some cases 3D Analyst and/or Spatial Analyst depending on customization specifications. Criterion is an ESRI Business Partner and Reseller.

### What are its data requirements?

Data needs are determined by the scope and number of indicators in a given version. Typically this includes parcel-level GIS coverages of land-use, housing, employment, transportation, infrastructure, natural environment, and related community data. Data availability is a key consideration in designing each custom version of INDEX to insure that it's compatible with local conditions.

### What are its standard outputs?

INDEX produces indicator results in numeric and spatial form; comparative charting of multiple case results; and documentation of all input parameters and assumptions. Optionally, scenarios can be visualized using 3-D modeling, photography, video, and drawings.

### Can INDEX be linked to other models?

Yes, it can import and export data files to create linkages to other community planning models, e.g. travel demand models.

### What user skills are required?

INDEX is usable by anyone familiar with ESRI products and GIS modeling generally. User organizations will need a model steward with advanced GIS experience for certain maintenance tasks.

### Are training and technical support available?

Yes, both are included with PlanBuilder and TransitNeighbor purchases, and are standard components of custom projects.

### How does someone obtain INDEX?

There are three ways to acquire INDEX: 1) purchase a standardized PlanBuilder or TransitNeighbor version; 2) purchase a custom version; or 3) retain Criterion to provide modeling services in cases where analysis, but not the software, is desired.

### How much does it cost?

PlanBuilder or TransitNeighbor can be purchased for \$3,900, including training and technical support. Custom version costs will depend on the type and scope of desired functionality, data availability, extent of public participation in the process, and amount of work shared between Criterion and local stakeholders. Criterion's fee is based only on its labor and expenses; there is no charge for the INDEX license. Organizations that sponsor custom versions may distribute copies to their stakeholders at no cost.

### Where can additional information be obtained?

[www.crit.com](http://www.crit.com) or e-mail [info@crit.com](mailto:info@crit.com).

## PLANNING WITH PLACE<sup>3</sup>S

By: Sara Stein, Parsons Brinckerhoff Consultants, Portland, Oregon

***The California Energy Commission has led an effort to develop public domain GIS software to support Smart Growth planning. The tool is designed to help communities balance their needs and meet long-term goals by selecting the best combination of land use strategies for their local circumstances.***

PLACE<sup>3</sup>S is an urban planning method and GIS tool that helps communities to understand how their growth and development decisions can contribute to improved sustainability. Its name is an acronym for PLAnning for Community Energy, Economic and Environmental Sustainability. Using GIS, PLACE<sup>3</sup>S evaluates how efficiently a community:

- Integrates land uses
- Identifies land for redevelopment potential
- Provides housing and jobs
- Transports people and materials
- Allocates public infrastructure improvements
- Uses other resources.

PLACE<sup>3</sup>S is unique in that it integrates public participation, planning, design, and quantitative measurement into a strong and diverse partner based planning process that is appropriate for both regional and neighborhood-scale assessments. It is being developed in the public sector by Parsons Brinckerhoff, Fregonese Calthorpe Associates and Space Imaging, with funding from the California Energy Commission and in collaboration with ESRI (the developers of ArcInfo and ArcView GIS).

The PLACE<sup>3</sup>S GIS tool is packaged as an extension to Arc/View GIS. It was designed to be useful in supporting smart growth concepts in regions, cities, and communities, and to be easily accessible to planners, policy makers, citizens and students. Together, the PLACE<sup>3</sup>S methodology and the GIS tool allow an interactive, participatory, analytical process to evaluate land use planning scenarios and their

impact on a community and region.

### The PLACE<sup>3</sup>S Method

The idea behind PLACE<sup>3</sup>S is that the planning and design choices that a community makes impact its development patterns, modal choices, infrastructure costs, redevelopment potential and livability.

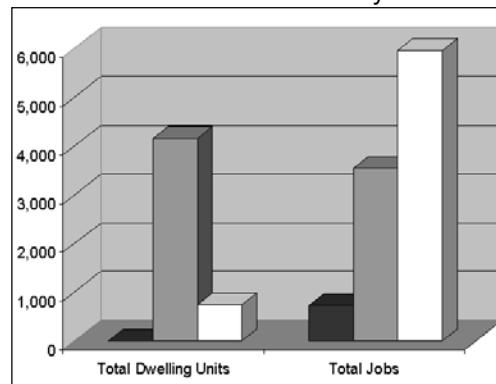


Figure 1: Job/Housing Balance

By being aware of their choices, communities can improve their economies, environments, and quality of life. The PLACE<sup>3</sup>S model helps a community balance its needs and meet its long-term goals by selecting the best combination of land use strategies for its circumstances. It does this by comparing existing conditions (how efficient the community is today) with future conditions (how much

more or less efficient the community could become) under a range of planning alternatives.

Instead of creating one optimum plan, PLACE<sup>3</sup>S provides a relatively simple, consistent quantitative approach to illustrate order-of-magnitude differences between planning alternatives. For example, rather than provide a single method to measure and reduce a region's traffic congestion, PLACE<sup>3</sup>S helps to create and quickly measure different land use scenarios so that a community can choose how to influence transportation mode choices, while also addressing other planning needs. The outcome of using the PLACE<sup>3</sup>S method is a more thorough integration of community goals, economic efficiency, and environmental improvements.

## The PLACE<sup>3</sup>S GIS Tool

The PLACE<sup>3</sup>S model uses a real-time, state-of-the-art GIS tool to analyze and display the results of different land use scenarios in an easily understood geographical format. PLACE<sup>3</sup>S can be used to create multiple future scenarios and present the information in a series of digital maps, data tables, and bar charts that effectively communicate results to the public and decision-makers. The data and maps help to clarify the trade-offs a community must make by providing a common yardstick for measuring and understanding how well a land use plan will meet a complex set of goals.

The strength of the GIS tool lies in its ability to easily and quickly create alternative land use scenarios that can be compared against each other and to a future projection of the present land use without modification. PLACE<sup>3</sup>S can also calculate how well each scenario compares to one or more sets of “indicators” for the values held important by the community and decision-makers.

- Acres of open space per person
- Access to retail

## Case Study: Sacramento PLACE<sup>3</sup>S

In the City of Sacramento, California, PB is using the PLACE<sup>3</sup>S planning method and GIS tool to develop a transit-oriented land use plan for the city’s 65th Street light rail station. PB and City staff worked together to generate a number of land use plans that would address the local conditions of the 60-acre site and connect the land uses surrounding the station area in support of light rail. The existing land uses are low density, suburban style office, retail, and industrial uses.

Six plans were created initially and their impacts measured in terms of numbers and densities of jobs and houses, transit boardings, vehicle miles traveled (VMT), air emissions and energy use.

Three of the plans addressed existing scenarios (e.g., existing land uses, current zoning, and what

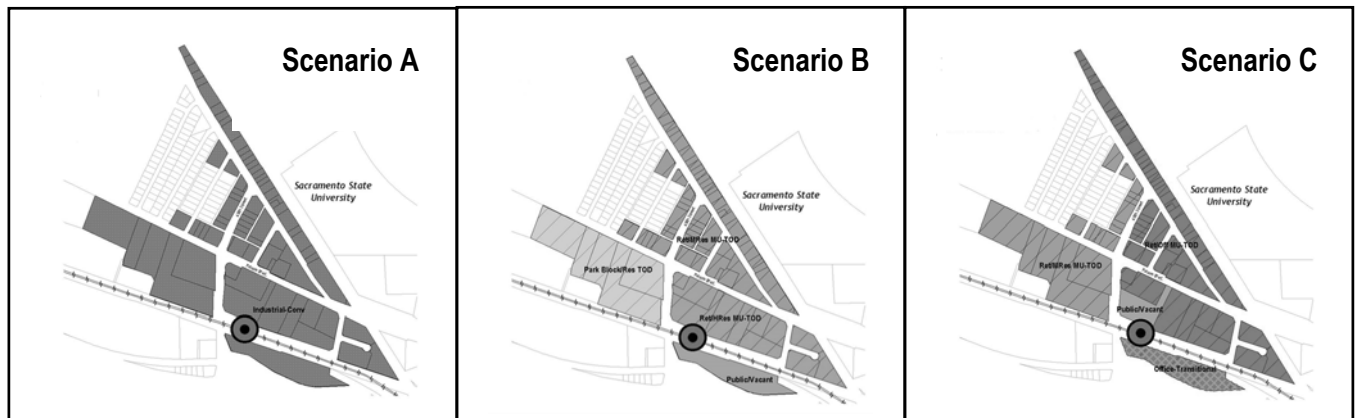


Figure 2: Existing zone (left), TOD with housing focus (middle), TOD with employment focus (right)

Some of the indicators that can be quantified using the GIS tool include:

- Vehicle miles traveled per household
- Jobs and housing units created through redevelopment
- Air pollution per capita
- Dwelling units per acre
- Employees per dwelling unit
- Jobs per capita

the “trend” may be in 20 years if the current zoning remained the same). The other three plans (Figure 2) presented alternative scenarios that incorporated smart growth principles (e.g., low intensity mixed use, transit-oriented development (TOD) with an employment focus, and TOD with a residential focus).

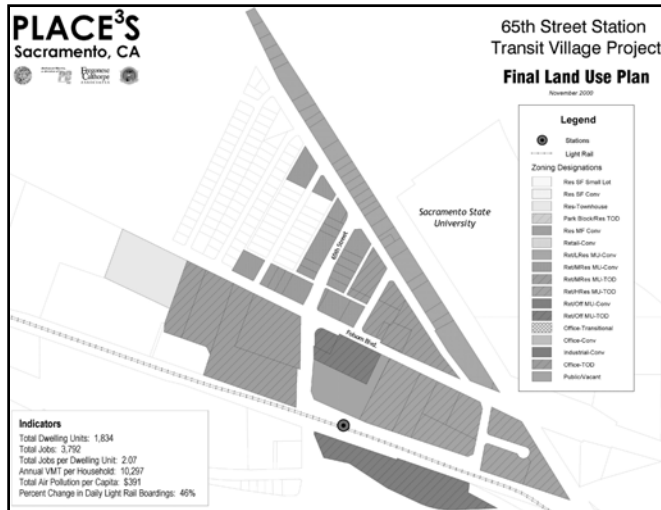


Figure 3: Final land use

Local citizens, property owners, and agency stakeholders used this information at a community meeting to increase the quality of their decision-making process and to develop consensus on future development for this site. The PLACE<sup>3</sup>S GIS tool was used interactively at the meeting to allow participants to create their own land use plans and measure each against a set of indicators. This ability allowed the participants to see how well their land use scenarios performed in terms of housing/jobs balance, transit boardings, etc.

In the end, every small group developed a preferred plan that would implement TOD principles for substantially higher densities (through taller buildings, lower parking requirements, and structured parking), and a balance of housing and employment uses (Figure 3).

Measuring the preferred plans, PLACE<sup>3</sup>S estimated a nearly 50 percent increase in train boardings from current conditions, and a 15 percent to 20 percent decrease in household VMT. The redevelopment module of the PLACE<sup>3</sup>S tool is now being used to estimate the economic feasibility of the different land use scenarios. In the next several months, the City staff and community will continue using PLACE<sup>3</sup>S to fine-tune their plans to make the 65th Street train station a mixed use, transit-oriented village that serves the students and faculty of adjacent Sacramento State University.

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## **Appendix I to Chapter 6: Summary of Panel Discussions with California TOD Developers**

**Primary authors of this section: Janet Smith-Heimer and Ron Golem,  
Bay Area Economics (subconsultant)**

### **Overview of Panel Discussions**

For this study, the subconsultant, Bay Area Economics (BAE), convened two panels of developers active in Transit-oriented Development (TOD) projects in California in order to gather their perspectives on opportunities and barriers for TOD and forms of public incentives or assistance that could result in more TOD projects. One panel was held for Southern California developers on February 1, 2001 and it attracted five developers. The second panel was held for Northern California developers on February 6, 2001 and attracted eight developers. Each panel lasted approximately one and one-half hours and addressed market acceptance, barriers, public incentives and assistance, and other issues identified by the panelists.

The following paragraph summarizes the main points from the panel discussion, while the following pages describe the detailed discussion, organized by topic. Appended to this document is a list of the panel participants and the TOD projects they identified as having been involved in (not a complete list).

### **Summary of Main Points**

The panels felt the following factors represent some of the most significant barriers to greater TOD:

- ▶ Entitlements – The inflexibility and lengthiness of current entitlement processes result in the missing of market cycles and development opportunities. Negative reactions to TOD proposals by neighborhoods around transit stations can create pressure for development that is less dense than currently exists in an area;
- ▶ Parking Requirements – Code requirements and/or transit agency requirements to replace existing station parking can be the single most significant factor in making a TOD project infeasible; and
- ▶ Insufficient Public Support – This includes a lack of political leadership supporting TOD, insufficient funds for infrastructure and other costs, lack of transit agency commitment and capability to do TOD, and lack of coordination between various public agencies that can affect or support a TOD project.



The panels felt that there is good market support for TOD projects and that changing lifestyle preferences and increasing congestion create long-term opportunities for TOD. The capital markets are seen as accepting of TOD, provided that a particular project is not the first new project in an area in some time and that there is evidence of other public and private investment occurring in the particular station area.

A number of suggestions were identified for increasing TOD. The most frequently mentioned was taking a “district approach” to entitlement, parking, and other issues in an entire station area. Appropriate TOD Specific Plans can reduce entitlement uncertainty and timelines. A district approach to parking can encourage sharing of parking and reduce the parking burden on a particular project. Other suggestions include creating TOD-specific joint powers-type authorities to achieve coordination between multiple public agencies for a particular station area “district” and to assist with land assembly. There was strong support for the state developing a “carrot” and “stick” set of measures providing incentives for local governments to facilitate TOD and overcome community opposition challenges.

At the same time, the panels felt that it is essential to remember that any new programs or measures must provide a range of alternatives to reflect the very different dynamics of TOD in urban vs. suburban areas and in areas seeking revitalization vs. already strong markets.

### **Developer Panel Participants:**

#### **Southern California – February 1, 2001**

Walter Eeds, President and CEO, PLC Greystone Apartments  
Michael Dieden, President, Creative Housing Associates  
John Given, Sr. Vice President Development, CIM Group  
Greg Shannon, President, Sedona Pacific  
Dalila Sotelo, Vice President, McCormack Baron Salazar  
Moderator -- Ron Golem, Senior Associate, BAE – Bay Area Economics  
Notes – Andrea Burnside, MTA

#### **Northern California – February 6, 2001**

Frank Arthur, Principal, Transit Village Associates  
Scott Falcone, Project Manager, Citizens Housing  
Robert Firehock, Senior Vice President, Telesis West  
John Given, Sr. Vice President Development, CIM Group  
Jon Gresley, Executive Director, Oakland Housing Authority  
Terry Huggins, Managing Partner, Pacific Capital Group  
David Mogavero, Principal, Mogavero & Notestine  
Philip Neville, Director of Development, Oakland Housing Authority  
Tom Sargent, Principal, Equity Community Builders  
Shad Small, HOPE VI Project Manager, Oakland Housing Authority





**Partial list of TOD and similar projects panelists have participated in:**

Frank Arthur, Transit Village Associates: Walnut Creek BART TOD

Michael Dieden, Creative Housing: MacArthur BART (with Jones Lang LaSalle)  
South Pasadena (on future light-rail line)

Walter Eeds, Greystone Mission Valley Rio Vista (San Diego)  
Denver, CO

Scott Falcone, Citizens Housing: Vallejo affordable housing project near bus station

Robert Firehock, Telesis West: Westwood Gardens HOPE VI  
Springfield, MA Train Station Rehab

John Given, CIM Group: Multiple compact urban districts in Southern California:  
(formerly with MTA)  
Hollywood  
Third Street, Santa Monica  
Pasadena  
Hollywood/Highland (MTA Joint Development)  
Gaslamp District, San Diego Mixed-Use

Jon Gresley, Oakland Housing Authority: Westwood Gardens HOPE VI  
(Philip Neville) Coliseum Gardens HOPE VI (Shad Small)

Terry Huggins, Pacific Capital Group: Fremont office building near BART station

David Mogavero, Mogavero & Notestine: Infill projects in Central Valley

Tom Sargent, Equity Community Builders: Ashby BART  
Presidio of San Francisco

Greg Shannon, Sedona Pacific: American Plaza (San Diego)  
Ballpark District around new San Diego ballpark

Dalila Sotelo McCormack Baron Salazar: Hollywood/Western (MTA Joint Development)  
East Los Angeles (with L.A. Housing Authority)

## Highlights of Developer Panel Discussions on TOD

### Market Acceptance

Many of the developers felt that there has mostly been good market acceptance of TOD where it has been done. Because of the modest amount that has occurred so far, the supply has been less than the potential demand. One developer cited property appreciation of 30% for rail-related projects.

One developer noted that although he had a difficult time with initial construction financing for his office building across the street from a BART station because it was the first new development in the area in nearly two decades, the project has been incredibly well received in the market place, and he is now obtaining entitlements for Phase II. His surveys indicate that, even with free parking for tenants at 3 spaces per 1,000 square feet of space, transit usage by tenant ranges from 10 percent to 40 percent, with the highest use by companies that relocated from San Francisco for lower rent. Tenants are also telling him that employees are moving their residences to be able to take better advantage of BART.

TOD projects may need to be at a sufficient scale, either individually or collectively through adjacent projects, to generate a “critical mass” that results in sale price or rent premiums. For example, the Oakland City Center office and retail project took a number of years to generate critical mass, but once it did by the late 1980s, office rents there were 10 to 15 percent higher than those in nearby Lake Merritt. City Center and Lake Merritt both contain Class A office space of about the same age and quality, so achieving these higher rents at City Center may be partially attributable to the presence of a nearby BART station. On the other hand, it was noted that there might be more of a premium for housing TOD than office.

Lifestyle preferences are leading people back to urban areas, and that will lead to increased transit ridership.

One of the Southern California developers felt that there are two “cities” (or markets) when it comes to TOD. The first is the majority of people who do not use transit and are not likely to anytime soon. The second is the group of people already living in more urban settings that are more pedestrian- and transit-oriented – it already exists, and TOD is likely to happen there without any real public involvement. In fact, projects in those areas that do not follow TOD precepts can still end up supporting transit.

Some of the challenges to market acceptance identified by the Southern California panel include:

- ▶ Getting people out of their cars. There are 15 million people in Southern California and most don’t use transit. As congestion worsens, however, people will become more motivated.

- ▶ No major real estate decisions even consider transit. Transit access is not currently a significant locational factor.
- ▶ Creating an attractive pedestrian environment is a key component. Mixed-use projects can help this.
- ▶ Perceptions of unsafe conditions around transit due to homeless, panhandling, etc. Tenants were discouraged because they saw themselves as having to wade through panhandlers every day when San Diego created large open areas around its TODs.

Several developers also talked about the social benefits of TOD in stabilizing crime-plagued neighborhoods. Urban areas were also cited as being better for youth. For example, the suburban fringes of L.A. have some of the highest rates of teen suicide in the country.

If housing near transit nodes becomes more expensive because of market acceptance and preference for its locational advantages, what will be done to ensure a supply of affordable housing? In other words, there is a danger that housing TOD could exacerbate rather than alleviate the shortage of affordable housing in urban areas.

### **Feasibility and Development Considerations**

We're now moving out of the first generation of TOD where developers built projects next to transit but didn't necessarily develop any real relationship to the transit or the neighborhood.

There are not enough transit users to create lively TODs – a mix of uses is required that can attract a wider range of tenants and customers. Timing is important. There are not a lot of projects that can be developed at one time, tied to the construction of transit. TOD is more likely to happen over time. Transit agencies may not be able to be as proactive as they would like to be.

There's a need for simplifying how TOD is done and allowing it to occur both at a large scale and a small scale. The current approach (where there are large TOD projects that are very complicated to develop) is never going to result in a significant amount of development. What's needed, for example, is the ability in Koreatown (on the MTA Red Line) for a Korean businessperson to develop a small, dense project on an acre or so, assembled from a couple of lots.

The Southern California developers strongly felt that one of the biggest problems is that transit agencies just don't get things done. There is no commitment to TOD by transit agencies – they'll issue Request For Proposals (RFP)'s and then nothing happens. Agencies are engineering- oriented and TOD is an afterthought. It is not treated like a marketing opportunity, as it should be.

Another problem related to transit agencies is their very high and often unrealistic expectations of the value of property. Agency efforts to get the highest possible price and inflexibility in sale terms significantly hinder the feasibility of TOD projects. Public easements and restrictions on transit agency-owned land could make financing more difficult and complex than is necessary.

Parking costs are a major impediment because it is difficult to make projects financially feasible with structured parking. This is exacerbated when, as is the case with some local jurisdictions and BART, there is a requirement for replacing existing free parking for transit users at stations with free parking in new structures (since the developer would absorb the cost of the parking structure at \$15,000-\$25,000 per space, but cannot generate any revenue from it). While one solution is to increase project density, many suburban areas have imposed height limits that can preclude this option.

One developer noted that although bus systems are not as popular, it is equally important to consider them in thinking about TOD in addition to rail transit.

The Southern California developers believed that another of the big constraints on TOD success is that routes are dictated by where cheap rights-of-way can be obtained. This often ends up putting stations across freeways or other barriers that serve to cut them off from the surrounding area. It was felt that it would be much more effective to identify where urban concentrations and districts are arising or likely to be, and then build the transit there rather than putting transit in an out of the way area and waiting for development to come to it.

## **Financing**

Developers on both panels noted that lenders and investors like to see other investment flowing into an area. It is very difficult to get them to provide the first new investment in an area, particularly when it is an existing urban area in need of revitalization and/or there are safety concerns or other negative perceptions. Financing will follow more freely after developers can point to successful TOD projects.

One Northern California developer, who built the first new office project in a suburban downtown area across from a BART station, had a significant challenge in getting a lender to provide financing. With the success of his project, and its demonstrated ability to generate high rents, getting financing for Phase II is not as challenging. He felt that capital markets are beginning to recognize the benefits of TOD; however, for projects that are located in rougher neighborhoods, there will always be reluctance in providing financing.

The same developer noted that the city initially wanted a parking ratio of 2 parking spaces per 1,000 square feet of office space, which would have made the project incapable of obtaining financing at the time. He and the city agreed on 3 spaces per 1,000 square feet. Because the project has been a success, he feels that the same lenders would now finance a similar project with 2.5 spaces per 1,000 square feet. Phase II of his project will replace the surface parking in Phase I with new development



and a parking structure, whose cost will be absorbed by the project (since his project is across the street from BART, he does not have to replace any of its parking, however he has had to set up controls to prevent BART commuters from parking in his lot).

Another Northern California developer felt that lenders still have some difficulty understanding the synergy of mixed-use projects, particularly that while the overall project may provide a sufficient return, some uses may generate above-market returns and other below-market returns. Lenders want to appraise and underwrite each use separately and don't always think "out of the box" when financing these sorts of projects.

The Southern California developers had a different view that the characteristics of TOD per se, whether greater density or reduced parking, do not make financing less available. Lenders and developers do not penalize TOD – instead, market factors and whether a project makes sense or not are key. Whether a project has credit tenants can be a more significant factor for TOD (as it is for any development). Lenders and investors are followers and like to see a lot of other private and public investment in an area. Also, taking a district approach to parking can address lender concerns – for example, in a Brea project, once the lender understood how adjacent development shared parking and worked together, it was not concerned about the project's lack of parking.

The Southern California panel had mixed feelings about ground leases. A couple of developers had entered into ground leases and pointed out that they had been used for very large TOD projects. They can be necessary because of restrictions on transit agencies selling property. Others felt that negotiating ground leases with transit agencies was difficult and inherently made such a project less attractive than other opportunities. The Northern California panel did not raise the subject of ground leases.

## **Development Entitlements**

Planning restrictions, through their prescriptive nature, preclude the flexibility for TOD projects to readily adapt to market conditions. Decision-making must be shortened and simplified to better match real estate market cycles; otherwise developers will continue to find themselves missing market opportunities that could have supported TOD.

There was extensive discussion by the Southern California panel regarding how plans and zoning tend to focus on uses, which creates problems when a site is zoned for residential but the market says office should be built there. One suggestion was that landform is more important than land use – as long as a project fits an appropriate 'urban form' (e.g. density, massing, etc.) there should not be as much concern about use. As markets change, buildings should be allowed to change use – e.g. an office building being converted to residential. Mixed-use projects should be encouraged but without being too specific about what uses are involved to accommodate evolving concepts of what constitutes good development.

Specific Plans were recognized as being helpful because they spell out the rules and look at an entire “TOD district.” A well thought-out plan can be an asset when it addresses a city’s unique nuances of dealing administratively with a project. It can also provide faster approval, which is important because of how quickly real estate markets change. Many areas have missed market cycles and opportunities because the planning and entitlement process takes so long.

While most people are anti-sprawl, it is often difficult to convince communities that greater density is a step in the right direction. Residential areas often buffer transit corridors. Residents are very concerned and don’t want to see changes. For the sites with mixed-use development potential, the question is, “What will make it happen in the face of neighborhood concerns?” A couple of developers noted that in the pre-development stage, several communities have rejected plans for anything taller than two stories at BART stations, even though the existing improvements in the surrounding areas are generally at greater heights. Local community opposition often creates a significant barrier for the “urban vision” that developers would like to create. A key impediment to acceptance of TOD is perception of increased traffic impacts from increased TOD density. There is a paradox here, because TOD can bring a lower rate of automobile usage, but density attracts new population to the site, bringing a net increase in cars and perceptions or fears of increased traffic.

Without a way of reconciling the potential for denser development on available sites with some communities’ negative reaction to increased density, the effort to create more TOD and less auto-oriented sprawl will become increasingly difficult. There was extensive discussion by the members of the Northern California panel on creation of an entitlement mechanism at the state level that would define TOD and provide a way to override local land-use decisions and zoning (such as voter-mandated development restrictions), resulting in considerably more TOD. However, another member felt that this would set the stage to recreate the worst mistakes of the urban renewal movement of the 50s and 60s, and that the solution must lie in educating and empowering communities to understand and benefit from denser TOD. A number of panel members felt that a combination of “carrots” and “sticks” that ties the availability of state incentives and assistance to local jurisdictions adopting TOD-supportive policies and plans is an essential step.

The Southern California panel noted that existing regulations enacted to solve previous planning problems could impede TOD. For example, Los Angeles enacted a ‘corner retail’ ordinance to require a Conditional Use Permit in order to limit strip mall development – but this same ordinance requires the delay and risk of obtaining a use permit for a desired TOD project on a corner.

Limiting development at the urban edge can help restructure markets and redirect development toward urban centers and promote TOD. One Southern California developer suggested that what Ventura County needs is an agricultural open space preservation ordinance that would create more compact development in the existing cities, which could then be connected with transit.



## Parking

Developers were explicit that urban TOD and dense mixed-use projects can cover the cost of developing their buildings, but often cannot support the cost of providing parking at current parking code requirements. Parking should be addressed on a district-wide basis, so that an entire ¼-mile station area can meet transit rider and other users' parking demands, reducing the amount of parking that needs to be provided by an individual project. Better quality and more compact development occur if parking is not a burden on particular development projects. Sharing parking is critical, and mixed uses in an area promote greater efficiency in the use of parking. For example, one developer was able to build a dense mixed-use TOD on a bus line in which the residential units have their parking in a structure across the street.

The Northern California developers emphasized that providing parking is a financial burden affecting the successful development of TOD projects. Some of the largest and most obvious parcels for TOD in the Bay Area are BART parking lots. However, the developing TOD on these sites has been challenging in part due to local jurisdiction and BART requirements for free replacement parking for transit users that impact project financial feasibility as well as local community reactions to concerns over increased traffic. One BART station has recently been allowed to charge commuters for parking, which may help address some of these challenges.

Developers in both panels stated that it is important to understand that appropriate parking ratios will vary by community and specific TOD site. The developers cited a number of perspectives and experiences that suggest different approaches to parking, depending upon whether TODs are located in urban or suburban areas. It is crucial to differentiate between parking at destination stations, such as at city centers, and commuter parking at suburban stations. The former should be discouraged, while the latter needs to be provided. For examples, several developers believe that urban parking codes need to be lowered – they're based on suburban standards and are not realistic or efficient. At the same time, it is not possible to mandate excessive parking reductions, as shown when San Diego tried to restrict parking at TOD sites by imposing parking maximums, and nothing got built. A TOD project in suburban San Diego provided two spaces per dwelling unit because that's what the market required due to its suburban location and people needing cars to go to places that transit doesn't. The city's discussion of a lower parking requirement was not of interest to the developer.

There is a growing realization that in suburban areas it may not be feasible to entice people to take buses or other transit to light-rail stations; and that current parking policies need to be rethought.

One developer of a TOD at a BART station noted that his project is considering overnight parking for people taking BART to the airport and setting up airline check-in to attract people with cheaper parking than is available at the airport. He also decided to include more parking because of the impending Bay Bridge retrofit and its impacts on commute times and patterns.

An idea mentioned by a Southern California developer that intrigued others was car sharing because it could serve to eliminate the need for any parking for residential units. They were interested in finding out more about it.

*(For additional information on this issue, please refer to a separate report entitled “Parking and Transit-Oriented Development: Challenges and Opportunities” available from the California Department of Transportation, Division of Mass Transportation, 2002.)*

## **Public Incentives/Assistance**

State and local officials need to assume a greater leadership role to make TOD more widespread. Elected officials should be provided with a set of tools to encourage and implement TOD-friendly policies. Oakland was cited as a City where the Mayor’s commitment to overcoming hurdles to development projects was seen as important to furthering TOD. On the other hand, the Southern California panel saw the political leadership in Los Angeles as a big impediment to TOD because of its emphasis on responding to the concerns of (mostly white) single-family residential neighborhoods.

Several developers agreed that there is a need for a “less government” as well as “more government” approach to TOD. The entitlement process needs to be made less cumbersome and the conflicts and lack of coordination between public agencies that can hinder TOD projects need to be eliminated. At the same time, there is a need for more grant money from the state, county, and local levels for defined TOD projects (i.e. those meeting set standards for minimum size, density, distance from transit, and location).

Examples of the significance of public assistance included one developer whose project is in a challenging area that the city is trying to revitalize. The project will need an approximately 20 percent or larger subsidy in the form of environmental remediation and infrastructure funding to make it feasible. Another developer’s TOD projects had required anywhere from 70 to 100 percent public financing for projects with affordable and/or public housing.

At the same time, one Southern California developer noted that he has not required any type of subsidy for his TOD projects because of their locations in strong suburban markets that do not impose affordable housing requirements (e.g. inclusionary zoning)

Another important opportunity identified by both panels is for the state to provide assistance to local governments to encourage them to take a “district” approach (e.g. Specific Plan) to TOD entitlement, parking, and investment needs. Such a “carrot” could be balanced with a “stick,” penalizing cities and counties that do not foster a district approach to TOD. Lenders and investors are more willing to provide investment when a commitment to TOD, including identified public investment, is made up front.

One of the challenges identified by the Southern California panel is that in L.A., the Community Redevelopment Agency (CRA) is not able to offer much in the way of



subsidies. At the same time, MTA is investing millions in areas but can't get private partners. There's a significant problem with how restrictions on the use of federal, state, and local funds don't fit with how real estate transactions need to be done. The inability of public agencies to be subordinate to other project financing from lenders creates huge transactional headaches.

A participant in the Northern California panel suggested a TOD-specific joint powers authority that would coordinate the work of multiple agencies involved in a TOD "district." This could address the failure of redevelopment agencies, cities, and transit agencies to work together to facilitate TOD.

While there is a need to standardize what is considered to be TOD for the purposes of incentives and other assistance, it is equally important to remember that every transit stop is contextual and that "one size fits all" solutions will have limited effectiveness. Perhaps TOD could be thought of more as a matter of good urban design or guided redevelopment.

### **Land Assembly**

Land assembly is necessary for creating larger and more attractive TOD projects, and is a necessity when revitalization is sought around a station area. More generous funding needs to be provided by public agencies. A public authority with powers for financing and assembling land for TOD projects (including eminent domain to overcome local reluctance) would result in a larger number of projects.

Transit stations often seem to be located in more disadvantaged and less desirable neighborhoods (perhaps because of less local opposition). Land assembly is particularly important in these areas because piece-meal development will not be effective in improving the neighborhood. One Northern California developer working on new affordable housing in a disadvantaged neighborhood noted that the California Department of Transportation is the owner of what would be obvious parcels for land assembly, but that it has been difficult to engage the California Department of Transportation.

This led to a discussion of California Department of Transportation's ownership of numerous parcels of land throughout the state – not only right-of-way strips, but sizable parcels near transit that could and should be developed. However, current state regulations require that such land be sold to the highest bidder, and this works against opportunities for using this land to aid TOD.

Transit agencies could also be helpful by purchasing land intelligently in conjunction with projects with an eye to future TOD opportunities.

## **Brownfields Issues**

Developers on both panels felt that there is a need for additional sources of funds for contamination not addressed by existing programs or for sites that require more funds than are available from current programs.

One developer saw property acquisition by redevelopment agencies via the Polanco Act<sup>i</sup> as the best way to go because it puts the redevelopment agency in charge of clean up and recovering costs from the responsible parties.

Grants are problematic because of the time burden. Another problem is that most of the brownfields grants are for non-petroleum contamination. Most transit properties or potential TOD sites have petroleum-based contamination which makes them ineligible for grants.

## **Public Improvements**

There is a real problem with public improvements, particularly street widening, being designed in a manner that works against opportunities for TOD. For example, the widening of Hollywood Blvd. and Western Ave. and the resulting degradation of the pedestrian environment was cited as a major factor working against MTA's TOD goals.

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<sup>i</sup> Health & Safety Code Section 33459. Provides liability relief for developers of contaminated properties.

## Appendix II to Chapter 6: Detailed 'Development Feasibility' Case Studies of Five TODs in California

**Primary authors of this section: Janet Smith-Heimer and Ron Golem,  
Bay Area Economics (subconsultant)**

*(Please note: These data were collected in 2001)*

### **Hollywood and Highland**

Los Angeles, CA  
Metropolitan Transportation Authority (LA MTA)  
Red Line Subway

This project contains intensive development of retail, commercial, and destination entertainment uses, centered on a public initiative to retain the Academy Awards ceremony within the City of Los Angeles. While transit access will enhance the project, the location within Hollywood and this relationship to the historic center of the movie industry were overarching considerations in its attraction to the site.

#### **Project Overview**

Hollywood/Highland is a major mixed-use destination project featuring retail, entertainment, and lodging. The project is located on the Red (heavy rail/subway) line of the MTA and is one stop south of the MTA station at Universal Studios, a major Southern California theme park. The Hollywood/Highland TOD and MTA station are now both open.

The development sits on an 8-acre site and is vertically oriented with buildings up to five stories in height. The development program is intended to take advantage of the strong potential of this area for tourism, which is estimated at 8 to 10 million visitors per year. The project includes:

Retail: 375,000 square feet with no department store anchors and approximately 70 tenants. Major tenants include a DFS Galleria Store, and Gap, along with numerous specialty retailers. Restaurants will occupy approximately 100,000 square feet of the space.

Hotel: A 640 room Renaissance (part of which includes a former Holiday Inn hotel on the site).

Movie Theater: A 6-plex totaling 40,000 square feet that will be tied into the forecourt of the adjacent Graumann's Chinese Theater.



Theater: A 3,500-seat “Kodak” theater that has become the new home of the Academy Awards ceremony starting in 2002. This is owned by the City of Los Angeles and will be managed by Anschutz Entertainment Group (manager of the Staples Arena in downtown Los Angeles). The concept for this theater is that it becomes “Radio City Music Hall West.”

Ballroom/Event Space: 40,000 sf. stand-alone ballroom and breakout space. The hotel will manage reservations; Wolfgang Puck Catering will handle food service.

Broadcast Studio: 7,000 sf. The developer is currently in negotiations with several networks.

Public Space: Public plaza with views of the “Hollywood” sign.

Parking: 3,000-spaces in a below grade structure owned by the City. While this figure is higher than what the parking code would require, given the visitor traffic and evening peak uses, the developer considers that the project does not provide sufficient parking for the land uses. The lot is owned by the City of Los Angeles. Rates will be with a 2-hour validation from the theater, with \$3 thereafter to a maximum rate of \$5.

## **Transit and Public Agency Participation**

The development results from assembly of eight separately owned parcels, only one of which (50,000 sf in size) was owned by MTA. The MTA parcel is on a long-term ground lease for 60 years with 4 10-year extensions. Base rent is calculated at an 8% yield on an appraised land value of \$125/sf, with readjustments every 10 years. Lease payments are set at 50% of the calculated amount during the construction period.

The City of Los Angeles is a major participant in two elements of the project. The first is approximately its bond financing of the 3,000 spaces below grade parking structure. The second element is its bond financing of the 3,500-seat theater that will host the Academy Awards ceremony, which the City was willing to do to ensure that the ceremony remains in the City (the Academy has been very dissatisfied with existing locations and was rumored to be considering a move to Orange County). The City also contributed to other incidental costs and accrued interest on the parking and the theater.

## **Development Team**

The developer and owner is TrizecHahn, excluding the theater and parking garage owned by the City of Los Angeles. David Malmouth from TrizecHahn is the Project Executive. There were three architects engaged for different portions of the project:

- Retail/Entertainment – Aaron, Krantz, Eckstut & Kuhn
- Theater – David Rockwell
- Hotel – Wimberly, Allison, Tong & Goo

Hypo Bank provided financing on a mini-permanent loan.





## Development History and Timeline

The site previously consisted of 8 separate parcels under different owners. Previous uses included a parking lot, office building, a garage, and a twin-plex theater attached to Graumann's Chinese Theater adjacent to the site.

MTA's original plan for its parcel included a large public plaza and parking garage. The developer identified the commercial and tourism potential of the site, and identified that MTA's design would have made future development impossible. The developer proposed a major development at the site to the Community Redevelopment Agency (CRA/LA) of Los Angeles and MTA, arguing that it would be a huge missed opportunity to not create a high-density development at the site that took advantage of the tourism opportunity. After review, CRA/LA and MTA agreed that the plans should be modified to allow commercial development.

The CRA/LA acquired the parcel that was subsequently transferred to the MTA. The selection actually occurred as a result of a larger CRA/LA 'request for proposal' (RFP), which TrizecHahn won, and the subject parcel was then transferred to MTA.

The remaining 7 parcels that comprise the site were owned by a variety of private partners, and TrizecHahn purchased the fee interest in some parcels and entered into ground leases for the others. The developer believes that this is one of the most complicated tract maps in Los Angeles history. It was willing to make the effort for the land assembly because of the tremendous development potential of the site.

The development timeline was as follows:

RFP issued for CRA/LA & MTA site:	10/96
TrizecHahn selected	2/97
Business deal completed	6/98
Entitlements approved	6/98
Start of construction	10/98
Completion of construction	11/01

By the time the project opened, it will have taken 5 years from the initial RFP, with construction underway 2 years after the RFP, which the developer considers short for a major urban project of this scale (although it feels that the project could have been done in 4 years without some of the delays created by various agencies).

## Entitlements

The developer worked with the City to design a unique entitlement process for this project, which essentially resulted in a Specific Plan for the project that included both the developer-owned parcels and the City-owned garage and theater. The EIR was prepared in conjunction with the planning process.



The developer felt that the entitlement process went smoothly due to the involvement of all relevant City agencies and focus on the project timeline and the large City investment in the project. The developer worked to give agency staff a sense of ownership on the project.

The developer was also active in working with community groups, with the project manager making more than 50 presentations. The early association of a new home for the Academy Awards ceremony with the project created a “halo” effect that the developer felt generated support for the project. While there were concerns that had to be addressed with neighbors regarding impacts, fit with the neighborhood, etc. the developer felt that it was able to demonstrate that the project would enhance the community’s quality of life, which it sees as a necessity for any urban project. The developer considers the fact that there was no lawsuit filed against the project to be a significant accomplishment.

There was some site remediation work that needed to be done, but nothing extraordinary. The site is located in a historic district (due to Graumann’s Chinese Theater next door), but there was no significant issue in establishing the compatibility of the proposed project.

### **Development Cost and Financing**

The entire project cost is approximately \$600 million. Aside from normal types of underwriting issues (e.g. lease up requirements), the developer felt that there was no issue in arranging financing for the project. Hypo Bank was selected because of the developer’s existing relationship with it.

The City of Los Angeles financed the parking garage and theater through two separate bonds. The first is approximately \$60 million for the parking garage, to be repaid from parking fees, business and license fees, and ‘transit occupancy tax’ dedicated from the project. The second element is \$30 million for construction of the theater that will host the Academy Awards ceremony, which the City was willing to do to ensure that the ceremony remains in the City (the Academy has been very dissatisfied with existing locations and was rumored to be considering a move to Orange County). This theater will be used year round for other projects. The City also contributed an additional \$8 million through CDAG and other sources to cover other related costs and accrued interest on the parking and the theater.

### **Design**

The developer felt that design was relatively straightforward. Design work occurred concurrent with the negotiation of the deal with MTA and other owners and entitlements processing.

The most significant complication is that due to the “verticality” of the project (i.e. uses stacked on top of each other). Exiting issues became tricky due to the large number of people that would have to be evacuated in case of an emergency. The fact that there is one loading dock for 70+ retail tenants is likely to create some interesting logistical challenges once the project opens.

The developer did experience some significant design issues with MTA because its station design was further along than the design of the project. Because of its project timeline, MTA had already bid work for the station prior to the developer finishing its design work. When the developer required changes to accommodate its project, MTA insisted that due to federal requirements and its process, it could not make any changes to its approved bid. What MTA did do was price change orders to the contract to accommodate the developer's requirements with the full cost to be paid by the developer.

Although not strictly a design issue, the developer felt that the construction interface between its project and MTA's work was the greatest challenge because both projects involve below- and above-ground elements. Issues were resolved mostly in the field by representatives of the various contractors.

## **Market**

The retail portion of the project is 80% pre-leased after one year of marketing at rents ranging from \$30 - \$130 per square foot per year. These rents are higher than the surrounding area and reflect the fact that this is a higher quality project that will draw significant traffic.

## **Lessons Learned**

At the time of this interview, the developer was in the midst of finishing construction, and has not had time to assess lessons learned. After the project opens, the developer will conduct a formal review of the project with its team to identify lessons learned, future opportunities for saving time, money, etc. The project executive has kept a journal throughout the development process and is considering writing a journal article on the project.

The developer felt that the sense of cooperation that was developed early on between the public and private sides, and the realization that "business as usual" would kill the project was essential. This allowed both sides to anticipate issues and needs and work together on moving the project ahead.

## **TOD Aspects**

While the developer considers the MTA station as a minor benefit to the project, the site's location, scale, and connection with Hollywood and its tourist appeal will be the basic ingredient in its success. Due to the scale of the project and its entertainment orientation, the project should generate substantial additional traffic for the MTA. The scale and entertainment orientation of this project, along with the extraordinary amount of public investment, are not likely to be duplicated in future TOD projects.

**Ohlone-Chynoweth Commons**  
**Santa Clara Valley Transit Authority (VTA)**  
San Jose, CA

This project illustrates an approach to blending affordable rental housing with nearby light rail transit access, enabling tenants to enhance their mobility, commute to work, and decrease private automobile expenditures. It also illustrates several pro-active planning and policy efforts by a transit agency and a city government to encourage TOD and higher density affordable housing development.

**Project Overview**

Ohlone-Chynoweth Commons is a 194 unit<sup>i</sup> 3-story multifamily and townhouse affordable housing development totaling 197,000 sf and set on 8 acres located at the Ohlone-Chynoweth Station of VTA in San Jose, CA. The units are targeted at families earning from 30% to 60% of area median income (AMI). The project also includes: 4,400 sf of retail space; a day care center with a 40-child capacity operated by Tri-Cities Fremont; and a 4,000 sf community center that includes a computer training center.

Parking is podium-style, with the multifamily units above, and consists of 369 total parking spaces for all project elements, occupying 95,000 sf of space. The project also utilizes some street parking to meet code requirements. Because the VTA lot continues to not be fully utilized, it also provides overflow parking for the project (e.g. for guests). The residential parking ratio works out to just under 2 spaces per 'dwelling unit' (DU).

**Transit and Public Agency Participation**

The site is ground leased for a 75-year term from VTA, with a below fair market value ground rent. The annual ground rent payment is \$250,000 and is subject to escalations based on the amount that AMI increases (i.e. it is tied to increases in rental revenues). The ground lease is not subordinated to other financing.

The City of San Jose provided significant assistance through the Redevelopment Agency in order to offset higher construction costs resulting from the need to build podium parking, which was not in the developer's original plans, and high construction cost inflation during the pre-development period.

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<sup>i</sup> 2 units are reserved for on-site managers. The mix is:  
50 1-bedroom units of approx. 560 sf  
64 2-bedroom/1bath units of approx. 1,000 sf  
72 3-bedroom/1.5 bath units of approx. 1,100 sf  
4 4-bedroom/2bath units of approx. 1,300 sf

The station was open before the concept arose of developing on a portion of the parking lot. Subsequent VTA exploration of joint development opportunities, along with several City of San Jose planning initiatives to encourage high density housing along its transit corridors (the San Jose Housing Initiative program<sup>i</sup>), resulted in the groundwork for this project's inception.

Prior to this project, BRIDGE Housing<sup>ii</sup> built an affordable housing project on an adjacent site. A new market rate apartment project is currently under development across the street from the project on private property (owned by the same person who originally owned the site of the VTA station).

### **Development Team**

The project is owned and developed by Eden Housing, a non-profit housing developer. The project architect was Chris Lamén & Associates in San Rafael, CA. The General Contractor was L&D Construction Co., Inc. Pacific Gas and Electric Housing Fund purchased Low Income Housing Tax Credits used to finance the project. The construction lender was Wells Fargo Bank, and the permanent lender is Bay View Bank.

### **Development History**

The site was originally developed as parking for the VTA Ohlone-Chynoweth Station. The station has more parking than necessary (its usage is in the middle range of VTA stations), so there was no issue or need to provide replacement parking. The site was originally offered through an RFP in 1995 that did not result in Eden being selected. The RFP was subsequently changed to include an affordable housing component and Eden was selected.

### **Entitlements**

The project manager came on board after entitlements processing (he was formerly a loan officer with Wells Fargo, the construction lender) and is not familiar with the detailed history. His understanding is that the process was quite political due to strong neighbor opposition and opposition from the City Council Member representing the area. Concerns were mostly raised in terms of traffic and school impacts, but the project manager believes that fear regarding affordable housing impacts was an unstated concern. There were at least 9 community meetings, and a key advocate for the project was Mayor Susan Hammer.

Entitlements were provided in the form of a Planned Unit Development (PUD) with project-specific zoning, with densities based on City policies for high-density transit corridor zoning.

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<sup>i</sup> Bay Area Economics (BAE) San Jose Housing Initiative program at: <http://www.bae1.com/Jobs/20.htm>

<sup>ii</sup> BRIDGE Housing, at: <http://www.bridgehousing.com/>

## Development Cost and Financing

The total project cost was \$16.2 million. The project was financed with the following sources:

- A 4 % Low Income Housing Tax Credit (LIHTC) with tax-exempt bonds issued by the City were utilized for financing.
- The San Jose Redevelopment Agency provided \$5.2 million in funds.
- A grant for \$574,000 was obtained from the Metropolitan Transportation Commission.
- Another \$500,000 grant was obtained from the HP program of the Federal Home Loan Bank Board.
- Bay View Bank provided permanent financing.

Because VTA would not subordinate the ground lease, private financing was challenging to obtain, since the lack of subordination required shopping around for a permanent lender willing to accept that any foreclosure would be subject to the ground lease provisions. In addition, the construction lender faced challenges related to the loan-to-value ratio for the project. Because the mixed-use aspect of the project is relatively limited, it did not pose challenges to the project developer in terms of financing.

## Design

One of the key challenges was the City's unwillingness to provide flexibility on design standards that are largely geared towards suburban projects. This was particularly the case for building height and parking ratios. The developer originally sought to avoid a parking structure to keep the project's cost down, but the City's requirement for nearly 2 spaces per DU required a structure. The project was ultimately developed at a density of approximately 27 DU/acre along with podium parking.

VTA sought a landmark structure to complement the station, which resulted in the construction of a clock tower for the project. VTA also emphasized creating retail development adjacent to the station.

Because the structure is 30 feet from the VTA tracks, noise reduction measures, including enclosed patios, were necessary. This adjacency also created significant construction challenges that required training workers in safety around tracks in operation. Because a street that remained in operation splits the site, moving heavy equipment back and forth was challenging.

The project was originally conceived with a very high level of amenities, including a swimming pool and other recreational amenities. However, as construction costs continued to rise, many of these amenities were removed to achieve greater cost savings.



## Market

As an affordable housing development, all of the residential units were committed prior to the completion of construction.

To date, one of the retail spaces of 1,500 sf has been leased at a monthly rent of \$2.30 per square foot 'triple net' lease. This rent is below area market rents due to the "strip mall" character of the space and the fact that it is off Chynoweth and the main parking lot entry to the station.

Although the project manager couldn't offer any specific suggestions, he believes that in any project that experiences significant political opposition, there are opportunities for alternative approaches to entitlements that would result in less resistance.

A key mistake in hindsight was the developer's effort over several rounds to obtain the 9% LIHTC in order to provide more financing support (at that time these credits were awarded competitively through a lottery system). This was during a time when there was significant construction cost inflation. Had the developer originally chosen to obtain the non-competitive 4% LIHTC, the savings in project construction cost would have more than offset the lower amount of equity that would have been obtained.

## TOD Design Aspects

The project itself is similar to many other projects that have been developed by Eden Housing, an experienced non-profit affordable housing developer. This project, according to the developer, does not have any significant or unique TOD-specific design features.

Access to transit is seen as an important mechanism for economic advancement for many of the resident households. Unfortunately, while VTA provides excellent access to downtown San Jose, Sunnyvale, and Mountain View, it does not provide good access to many other South Bay cities. However, the project still illustrates the potential for ready access to transit to complement affordable housing development.

## **EmeryStation**

Amtrak Station and Emery Go-Round Shuttle Bus to BART  
Emeryville, California  
(East Bay of the San Francisco Bay Area)

This project is unique due to its long-term, multiphase approach to creating contemporary office buildings, live/work units, and retail in a formerly distressed Redevelopment Project Area with TOD development potential. A foresighted private developer, along with business-friendly local government, worked collaboratively to create a new Amtrak and multimodal transit station, further enhanced by a privately funded bus shuttle system offering access to a distant (2+ mile) BART station.

### **Project Overview**

EmeryStation refers to an approximately 20-acre site in Emeryville owned by Wareham Development that is roughly bounded by the Amtrak and Union Pacific rail lines, Powell Street, Hollis Street, and 62<sup>nd</sup> Street, excepting the block at the corner of Powell and Hollis Streets. Wareham also has extensive other property holdings in Emeryville, including biotech facilities that it has developed for Chiron, a leading biotech company.

The property has been under long-term ownership for approximately 20 years by Wareham Development, and consists of both rehabilitated buildings and new construction, including development projects that are currently underway. The project's elements include:

- ▶ EmeryStation (No. 1), a Class A mid-rise office building of approximately 280,000 sf with below-grade parking;
- ▶ EmeryStation North (or No. 2), a Class A mid-rise office building of approximately 170,000 sf currently under construction, with occupancy expected in April;
- ▶ EmeryStation (No. 3), a parking structure that will soon begin construction for occupancy in approximately 12 months of approximately 101 rental or for-sale (yet to be determined) market-rate condo units;
- ▶ Eventually, approximately 30,000 sf of retail in EmeryStation Nos. 1 – 3. Some of this space has been leased as offices until retail can be supported, but it is planned for eventual retail use;
- ▶ The Amtrak station is owned, financed, and developed by Wareham and leased to the City, which in turn leased it to Amtrak. The Amtrak station also includes a Hertz rental car operation. This is a long-term lease that will eventually result in transfer of ownership to Amtrak;

- ▶ Transit center on reconfigured Amtrak parking lot to provide more facilities for AC Transit and Amtrak connector buses and more parking for the Amtrak station (since many train riders drive to the station);
- ▶ Approximately 200,000 sf of other mixed-use commercial and R&D development in rehabilitated buildings; and
- ▶ Approximately 100,000 sf of 20-year old conversion of industrial space to rental loft units. Because of long-term tenants and the nature of the building, Wareham has not aggressively raised rents, resulting in below-market rents for these units.

### **Transit and Public Agency Participation**

Because of the long-term nature of the project, the developer has had an ongoing relationship with the City whereby he has assisted the City and the City in turn has assisted with some property acquisition and provided flexibility on certain entitlement issues. The properties are located within a Redevelopment Project Area, which encompasses most of the City of Emeryville.

Examples of the developer's assistance to the City include his financing, developing, and leasing to the City of a new Amtrak station site, and a current project reconfiguring surface parking and subsidizing establishment of a transit center to enhance bus operations. The City purchased the property on which EmeryStation No. 3 sits (parking structure and future residential development) and sold it to Wareham, and has also traded other land with the developer.

There was no transit agency participation in the original property. Because the site is approximately two miles from the nearest BART station (MacArthur), Wareham Properties, along with Chiron (one of its tenants) and other major corporations located in Emeryville who were already running private BART shuttles, jointly initiated the "Emery Go-Round," a bus shuttle, at their private expense. The bus shuttle to BART makes multiple stops along its route, providing connections to the MacArthur BART station and within Emeryville, including between several major retail and residential projects. The shuttle operates from MacArthur BART to Emeryville from 5:45 am to 9:30 pm on a 15-minute headway. Return service from Emeryville to MacArthur BART runs from 3:30 pm to 7:30 pm and is free for its riders, a decision that was made because the BART connection is critical for marketing the Wareham project; this no-cost service also encourages maximum use and mitigates potential riders' reluctance to wait for a shuttle. Wareham has also arranged later Emery Go-Round service for its tenants, at additional expense to itself, to accommodate the work schedules of the employees of its high tech tenants.

The Emery Go-Round was established as a private Transportation Management Authority approximately ten years ago. It was originally a voluntary project by the involved property owners and tenants, but as the City understood its benefits, the City established a nexus and imposed fees so that more recent projects have been required to support the service.



For Wareham, this changed situation has meant that some of its properties help support the shuttle on a voluntary basis, while others are required as a condition of development approval by the City.

While the Emery Go-Round is considered very successful, continuing strong growth in Emeryville is creating pressure to expand the system, which is finding it difficult to finance the expansion. The system is also looking at the need for major capital investment to replace and upgrade its existing fleet of buses. The possibility of creating a Business Improvement District (BID) whose primary purpose would be to increase the funding base for the shuttle (only approximately 1/3 of property owners with stops currently participate) and its stakeholder group is currently being examined.

Some larger tenants in Emeryville with operations in San Francisco run their own private shuttles between the two cities because it is seen as faster than taking the Emery Go-Round to the distant BART station for a BART trip to San Francisco.

### **Development Team**

The developer is Wareham properties. Prudential is an equity partner in all of the new construction projects. The architect for all new construction has been Heller Manus Architects. The rehabilitation projects were done by a variety of architects.

### **Development History and Timeline**

Wareham's ownership of the overall site dates back approximately 20 years, a time when the City of Emeryville had not yet experienced its subsequent considerable redevelopment activity that makes it a thriving office and R & D market today. The site originally consisted of a variety of deteriorated and blighted industrial buildings with considerable open space between them and no internal circulation. Rehabilitation of a building into live/work lofts was its first project, followed by rehabilitation and change of use of other buildings into a mixture of commercial and R&D uses. Wareham sold a site at the northwest corner of its property to the U.S. Postal Service for a post office and mail sorting facility (at the time, USPS believed that rail access provided by this property's location would be important for mail distribution).

The site of the new EmeryStation buildings was an old Westinghouse factory. Wareham had originally planned to rehabilitate the main factory building, however it was damaged beyond repair in the 1989 Loma Prieta earthquake. This led to its demolition and the freeing up of the site for the new EmeryStation office buildings. All of the sites had brownfield issues. The developer has extensive experience in working with regulatory agencies on remediation and was able to obtain loan and grant funding assistance through the City.<sup>i</sup>

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<sup>i</sup> The City of Emeryville operates an extensive brownfields program, due to the extensive impact of earlier contamination on many of its potential commercial redevelopment sites.

EmeryStation has had a 20-year development history and will be built-out once the new condos on the parking structure are completed.

## Entitlements

The project received Master Plan approvals some time ago. A key element of the City's approval that made the project feasible was allowing the developer a "pay as you go" approach on infrastructure, rather than requiring up-front payments. Because of the project timeline, individual project components have required some supplemental review and variances due to changes in market conditions and opportunities, but the developer has not considered this to require significant effort. Historically, the developer believes that the City has been more open to office development than residential.

The developer considers Emeryville to be a very business-friendly small city. Wareham has sought to enhance the quality of its projects in Emeryville to set a standard for other development and strengthen its credibility with its numerous projects in the city. The City has assisted the developer in obtaining grants for brownfield and other project improvements.

Most buildings in EmeryStation have a parking ratio of 3 spaces per 1,000 sf, reflecting suburban parking standards in the City's code (the developer sees the City as blending both an urban and suburban character). Because transit is seen as complementing rather than replacing access by automobiles, there has not been an interest in reducing parking requirements. The City does provide credits against parking requirements for measures to encourage use of motorcycles and bicycles. Because the site was originally open former industrial area, there has been concern from existing businesses and residents when new development is seen as "taking away" large open areas that had been used for parking. The developer believes that parking could be reduced by approximately 10% without impacting the project.

## Development Cost and Financing

The entire EmeryStation project is estimated by the project manager to represent approximately \$200 million in investment at build-out. Wareham Properties would not disclose specifics of financing, however it did note that individual projects have separate financing, and that due to its long-standing relationships with lenders and investors, financing has not been a major challenge.

One finance challenge that was noted was Wareham's financing and development of the Amtrak station on its property (which was then leased to the City and subsequently to Amtrak, with ownership eventually transferring to Amtrak). The Amtrak station was seen as risky, and the developer had to assume some of that risk and provide guarantees against default in order to obtain financing (further specifics were not available).

## Design

The developer did not consider any significant design challenges to be present in this project. The particular design of the new construction, with brick façades, was chosen to



recall older, smaller scale industrial rehab projects prevalent elsewhere in Emeryville. Mid-rise development was chosen over high-rise development in order to preserve a more human scale.

## **Market**

Wareham Properties does not believe it receives any rent premium resulting from the project's significant access to multiple transit systems. The developer does believe that transit may have enabled it to get slightly higher quality level of tenants, in terms of credit rating and longevity, experience faster lease-up, and retain more tenants in the long run.

Current office rents range from \$30 - \$36 per sf triple net lease per year, with lease expenses running \$9 - \$12 per sf per year. Occupancy rates are currently at 99%.

## **Lessons Learned**

The development project manager did not identify any project-specific lessons learned. He noted that from his perspective, he learned quite a bit about the difficulties in working with transit agencies. A particular example involved the Amtrak station, where rather than having the typical vending machines, the developer wanted to have a coffee cart to offer riders a higher level of service. While at a local level Amtrak was willing to incorporate this higher level of amenity, there was resistance with the national level of Amtrak management, because this approach did not fit its standard development program and contracts.

## **TOD Aspect**

EmeryStation is an example of a major landowner with a long-term perspective incorporating new and improved multi-modal transit access into its development and marketing strategy in order to pioneer large commercial projects. Emeryville's location at the foot of the Bay Bridge and adjacent to Interstate 80 provides excellent automobile access. Wareham foresaw the development of a full complement of transportation choices – including BART, Amtrak, and AC Transit local service to the Amtrak station and express service to San Francisco via the Bay Bridge -- in addition to automobiles, as a critical competitive factor for the project. Wareham sees the popularity of the Amtrak station, with over 70,000 passengers per month (second only in California to Union Station in Los Angeles) and the increasing attractiveness of Amtrak's Capitol Corridor service (as service levels increase and Interstate 80 congestion worsens) as a growing opportunity.

Approximately 2/3 of EmeryStation's tenants originally came from San Francisco. The project now draws tenants from throughout the Bay Area, supporting Wareham's strategy of strengthening multiple modes of transit access. The developer's financial support of a bus shuttle to BART and other transit improvements is unusual, but is based on its long-term ownership of a property with multiple phases and ownership of other properties throughout the City. This allows a perspective justifying a particular transit enhancement



even if it doesn't benefit that specific phase of a project, as long as it is seen as benefiting the overall project or the developer's relationship with the City.

## **Richmond Transit Village**

Richmond BART and Amtrak Station  
Richmond, CA

This project is noteworthy in several ways. The Richmond Transit Village seeks to revitalize underutilized parcels, catalyze new investment in a downtown which is perceived as blighted, create moderately priced homeownership opportunities with transit access, create a new cultural node for area residents (via a project component planned to house several arts and cultural organizations), and simultaneously redesign/reconfigure the only joint Amtrak/BART transit station in the Bay Area through a creative use of multiple public transit and related funding sources. Moreover, the Richmond Transit Village is located at the Richmond BART station, the terminus of one of BART's lines, offering a substantial opportunity to create a regional destination, including attraction of park-and-ride transit riders from the surrounding suburban areas.

### **Project Overview**

The Richmond Transit Village, located between Barrett and Macdonald Avenues and Marina Way and 19<sup>th</sup> Street in downtown Richmond, is a mixed-use project currently in pre-development. The project site combines several parcels owned by the City of Richmond Redevelopment Agency and BART, located on both sides of an intermodal transit station for BART and adjacent Amtrak. Rail tracks bisect the site.

The location of the Transit Village is noteworthy because it is in the "Iron Triangle" of Richmond that is bounded on two sides by rail lines and on the third by a major oil refinery. The Iron Triangle contains the City's historic downtown area, approximately ¼ mile west of the site, with numerous vacant buildings as a result of a decades-long decline. Prior to revitalization efforts in the 1990s, the area was known for crime and drug violence, and continues to suffer from the perception of it as a blighted inner city area. Aside from the BART parking lot, the rest of the site has been vacant since BART's construction in the late 1960s. Two major employment centers are located nearby; a regional Social Security office building is located across the street from the project site, and a Kaiser Hospital is located several blocks from the site.

Planned project components include:

- ▶ Substantial transit station and transit-related improvements, including reconstruction and reconfiguration of the Amtrak/BART station as well as elevation of a previously sunken pedestrian walkway bisecting the site.
- ▶ 231 residences (50% of which are at 'affordable' prices), including 109 live/work units and 122 townhouses developed in two phases.
- ▶ 20,000 square feet of retail scattered throughout the project.



- ▶ 30,000 square foot cultural arts facility funded by the City or an arts organization. This facility has been discussed as a new home for the East Bay Performing Arts Center; the City is now working with the East Bay Performing Arts Center to resolve funding and financing issues so that it can construct and operate the performing arts center portion of the project.
- ▶ 700 space parking structure to replace BART surface parking lots used in the development (BART is currently looking for funding to construct additional parking in the structure).
- ▶ A total of approximately one acre of parks in scattered locations throughout the project, situated so that future residences face onto them.

### **Transit and Public Agency Participation**

Public agency participants include the City of Richmond Redevelopment Agency, BART, and Amtrak. The Redevelopment Agency owned the vacant lots on the site (non-BART parking lots) that had been cleared at the time of BART construction in the late 1960's. The agency worked with BART to assemble the site, select the developer, arrange multiple public financing sources for station and platform reconfiguration (plus contracting with the selected developer for the station and platform work), and assist in development of the cultural arts facility component of the project. BART participated in design work to reconfigure the existing station to correct serious design flaws that hid the station entrance from public view, and BART provided its 16-acre station area parking to the Redevelopment Agency in return for construction of replacement parking at a 1:1 ratio, subject to its approval of the station design and the parking structure (BART is currently exploring funding alternatives for providing additional parking). Amtrak concurred with the reconfiguration and relocation of its platform to fit within the new BART/Amtrak station area (this component is currently under construction— as of March, 2001).

### **Development Team**

The developer is The Olson Company. Peter Calthorpe Associates is the Project Architect. Wells Fargo Bank is providing construction financing. As the residential units are all for-sale, there is no permanent lender.

### **Development History and Timeline**

The site was originally cleared in the 1960's for construction of the BART system. The portion occupied by the BART station, tracks, and parking lot was transferred to BART. The remaining property, which has remained vacant, has been retained by the Redevelopment Agency to the present time.

The development timeline has been affected by project challenges for the City, including initial concerns regarding identifying the "right" developer with sufficient interest and capability to carry out a complex public/private partnership within a perceived blighted infill location.

The Redevelopment Agency secured the Olson Company after undertaking two rounds of developer solicitation via a competitive RFP process. The first RFP effort did not generate responses that met City criteria. A second RFP was issued in 1999, resulting in selection of the Olson Company team. In preparing its second RFP, the City worked with a consultant, Bay Area Economics (BAE), who conducted a pre-development feasibility study and formulated a vision for the project consistent with City goals. This early work, along with initial community meetings, helped guide subsequent developer responses and City/Agency review of submittals. During the evaluation process, staff and the consultant worked directly with policy makers to identify which elements of proposed projects would meet City goals. In addition, BART helped pay for the project and also was involved in every step of the process. Further, policy makers include BART board members – two of whom participated in the developer interviews and in selecting Olson.

The residential component of the project will be developed in two phases. Construction on Phase I, consisting of approximately 112 units, is expected to begin by the end of 2001. Models will be completed by Summer 2002, with the first delivery of new units by the end of 2002. Phase I is expected to take approximately two years to sell, with Phase II taking approximately another two years, for a total project timeline of approximately four to five years.

## **Entitlements**

The City's existing Center Specific Plan and General Plan required amendments to approve the project; these were completed by adding a section to the Specific Plan that specifically addressed the project. Because the project is seen as an important opportunity to revitalize the "Iron Triangle" neighborhood of Richmond, an area that has suffered from crime, blight, and image problems, there were few community concerns. With the emphasis on homeownership, the neighborhood considered the project as securing and stabilizing the area, and has strongly supported it.

The Specific Plan Amendment for the Richmond Transit Village was completed as an overlay to provide more flexibility (this is allowed by the Specific Plan process). The City has implemented this procedure on a project-by-project basis to avoid the need for a zoning variance. However, while this approach may expedite entitlement processing, it can be time consuming, and can cost up to \$60,000.

As the City commenced processing the Specific Plan Amendment for the Transit Village, issues arose within City departments seeking to revise other aspects of the adopted Specific Plan. The Redevelopment Agency worked to prevent such "piling on" that would have increased the cost and timeline for processing the Specific Plan Amendment for the Transit Village.

## Development Cost and Financing

The total cost of the project, not including the transit improvements, will be approximately \$40 million (see discussion below regarding transit improvements). According to the developer, its ability to obtain construction financing is based on its strong relationship and track record of successful pioneering projects (and the developer believes that other developers without such a track record would face greater challenges in this case, due to the pioneering nature of the project). Another factor has been the developer's ability to provide market research establishing support for the project.

Assistance for homebuyers is provided through Fannie Mae programs. The City is also providing "silent" second mortgages for qualifying households. Richmond is still resolving the specific details of public support for the residential development but expects to provide approximately \$15,000 per unit in subsidy from its 20% Redevelopment Agency set-aside funds, as well as approximately \$1.3 million towards infrastructure and utility relocation costs. This latter subsidy is likely to be funded by reimbursing the developer's purchase price of \$1.2 million for the site. The final amount of infrastructure subsidy from the City will be determined in the future, based on pending studies.

For the public financing of transit improvements, the Redevelopment Agency worked with the West Contra Costa Transportation Advisory Committee (WCCTAC, made up of representatives from the County, AC Transit, BART, the Richmond City Council, and other Bay Area cities) as the sponsor of transit-related grants. A total of approximately \$21 million was obtained from a combination of federal, state, and local sources for various station area and transit-related improvements. Funding was obtained for the following projects from the indicated sources:

<b><i>Project</i></b>	<b>Funding Source / Amount</b>
BART station improvements	BART: \$1.25 million
Design and construct new bus transit center	Federal: \$1.7 million
Center platform design and construction	State (TCI & Prop. 116): \$2 million
Misc. project components	Local: \$0.19 million
Reconstruct walkways, Phase I station design, construction	Federal (TEA-21): \$0.75 million State (via FTA): \$2.5 million
Phase II station design and construction	State (TIP): \$0.5 million
Increase station capacity and services	STP/CMAQ Corridor Mgt: \$0.58 million
Complete walkways and station building	State (TIP): \$2 million
Other public improvements	(EDI, Sec. 108 loan): \$4.5 million
Parking Structure	State (Governor's Traffic Congestion Relief Plan): \$5 million
Intermodal station improvements	Developer fees: \$0.033 million

## Design

The overall residential density is approximately 26 dwelling units per acre. This contrasts with the City's original goal of 80 dwelling units per acre, however there is insufficient market support to make the original goal feasible. Parking is provided for the residences at 2 spaces per unit with either tandem or side-by-side spaces. The market and resulting economics of the project would not support podium parking, according to the developer.

Units adjoining tracks are designed as "single-aspect" units which are oriented towards the front entrance, with the back of the unit against the tracks containing utility rooms and extensive attenuation measures to deal with noise and vibration from BART, Amtrak, and a freight spur rail line.

Maintaining visibility and adequate circulation to the transit station, which lies in the middle of the site, was another design challenge. This was in part addressed by using live/work units to create more of a streetfront appearance with office uses activating the space.

Coordinating construction of residential units with the reconfiguration of the transit station and related improvements is a major challenge, which is why the City hired the developer, The Olson Company, as contractor for the station improvements. This arrangement has helped to seamlessly coordinate the station design and construction work with the adjacent mixed-use TOD development.

Parking requirements are based on standard City ordinances; however, because the units are for-sale, the developer has planned for a 2-car garage for each unit, even though the City's regulations would have allowed 1 space per unit. The live/work units are designed to have home office units in front of parking and are designed so that offices can expand into the parking behind them. Allowing this design and approximately 77 of the units to provide two spaces via tandem parking was an exception that was approved because of the proximity to transit.

## Market

Pricing has not yet been determined, however units are expected to sell between \$170,000 and \$200,000. While this will be approximately \$30,000 higher than home prices in the surrounding area, this will represent some of the most affordable market-rate new units in the San Francisco Bay Area, which is why the developer believes there will be strong market acceptance for this product. Proximity to BART, two major employers within several blocks (Social Security regional office and a Kaiser Hospital), Richmond's downtown area, and new marinas are seen as benefits. The developer noted very strong acceptance for more distant new housing at \$150,000 per unit on the Richmond Parkway.

Rental rates for retail space are expected to range from \$.95 - \$1.50 triple net lease (NNN) per month, with the developer expecting an extended leasing period and higher rents to be achievable only over time (by comparison, a neighborhood center developed diagonally



across the street in the early 1990's leased at \$1.35 NNN). This reflects the weak demographics of the area and the non-retail character of the overall project.

As the project has received favorable press, it has sparked new developer interest, particularly for single-family and multi-family residential development, in the surrounding area. Existing residents also appear to be reinvesting in their property. More interest is also being expressed in adaptive reuse of vacant historic buildings in the City's original downtown area (which is approximately ¼ mile west of the project site).

The City is planning additional streetscape improvement to encourage private developments in the surrounding City Center area, and is willing to support additional projects based on developer requests.

### **Lessons Learned**

Although the developer is not financially responsible for the station redevelopment, its central location makes it an integral part of the project. Early transit improvement cost estimates turned out to be considerably too low, which meant delays in going back and raising additional funds. Fortunately, there are many sources of funding available for transit improvements.

Another challenge was in working with the multiple City departments involved in the project. A lack of communication between departments, or differences in opinion, generated extra work for the developer and the Redevelopment Agency. Some of these disputes required the intercession of the City Manager to resolve.

At the beginning of the project, the developer was not aware of many sources of funding available to support TOD projects, particularly for-sale units. As the developer proceeded, he identified additional public funding sources, to which the City has subsequently made applications (e.g. Metropolitan Transportation Commission's Transportation for Livable Communities program). Having become more familiar with TOD sources, the developer plans to utilize more of these programs to support his future TOD projects (however, since he is oriented towards for-sale projects, he is not interested in LIHTC or other projects oriented towards rental units).

### **TOD Aspect**

Although developed at a relatively moderate density for TOD, the Richmond Transit Village is considerably denser than its surrounding neighborhood and is seen as a catalyst for enhancing revitalization efforts that are already under way. Although the project is primarily for-sale housing, the location in an area that does not have strong market activity will result in housing that is considered fairly affordable for the region. The redesign of an existing transit station, and securing of multiple sources of public funds for these improvements (totaling approximately \$21 million) was synergistic because the transit improvements were needed to create a viable development project, while the prospect of increased population and transit use helped in securing funds for the improvements.

## **Rio Vista West**

### **San Diego Metropolitan Transit Development Board (MTDB) and the City of San Diego, California**

This project, a master planned mixed-use community, illustrates the challenges of following TOD-supportive public policies that may not be readily accepted by other city departments in the approvals process. The project also illustrates how changing market conditions and product types can shift TOD emphasis toward more conventional land use patterns, even after plans for TOD are in place.

#### **Project Overview**

Rio Vista West is an approximately 95-acre master planned project created by CalMat Properties and located along the MTDB Blue Line extension into the Mission Valley area of San Diego. The project consists of the following components, each of which was constructed by separate developers who purchased parcels from CalMat:

- ▶ 325,000 square foot Rio Vista West Shopping Center that opened in 1995 and is oriented towards big box retailers (anchored by K-Mart);
- ▶ 240 units of medium-density housing; and
- ▶ Two phases of mixed-use development with high-density housing with eventual build-out totaling up to 1,070 units, and 30,000 to 50,000 square feet of retail and neighborhood/professional offices.

Calmat also owns adjacent property that is not considered part of the TOD-oriented Rio Vista West project.

#### **Transit and Public Agency Participation**

CalMat donated land to MTDB for the light rail right-of-way and the station at Rio Vista West, but was not otherwise involved with MTDB in the development of Rio Vista West.

#### **Development Team**

CalMat properties served as the master developer. The Morgan Group developed the medium-density housing, and The Greystone Group is the developer of the high-density housing currently under construction. The shopping center developer was not identified during research interviews conducted for this case study.

#### **Development History**

CalMat is a construction materials and mining company, and the site was used for a number of years for mining activities. Once it reached the end of its useful life in the 1970's, the property was reclaimed and transferred to the real estate development division of CalMat. A first round of planning in the early 1980's provided entitlements for dense development at the site (see discussion below). By the early 1990's, it was clear that a new plan was needed to respond to changed market conditions. This plan



incorporated a TOD orientation. Once entitlements were obtained, CalMat made backbone road and infrastructure improvements and sold parcels to the individual developers of the retail and medium- and high-density housing. The Rio Vista West Shopping Center was the first parcel developed and opened in 1995. The medium-density housing followed, and currently the first phase of the high-density housing is under construction.

### Entitlements

An original Specific Plan was developed as part of the First San Diego River Improvement Project in the early 1980's; this Plan led to a Development Agreement with the City of San Diego. The Plan provided extensive entitlements for dense development in return for the developer making improvements that the City wanted to the nearby San Diego River as part of a river restoration project.<sup>i</sup> However, changes in market conditions in the 1980's meant that plan no longer met market conditions.

Two new considerations arose by the time preparation of a second plan commenced in the early 1990's. The first consideration was the planned extension of the Blue Line to Mission Valley, enabling CalMat to identify the opportunity to work with the future transit line for the benefit of the project. The second consideration was the City's adoption of policies to encourage TOD design in projects.

As part of its efforts to gain acceptance for the project, CalMat agreed to donate land for the light rail right-of-way and the future transit station. TOD Guidelines were developed and implemented that are incorporated into the project's design guidelines to ensure that the individual development projects support transit. It is important to note, however, that the overall density of the project did not increase compared to the previous plan; in fact, due to traffic considerations, CalMat was not able to utilize all of the previously allowed density in the new plan.<sup>ii</sup> Thus, while the City's TOD Guidelines do provide density bonuses, they were not a consideration for this project.

The most significant challenge in the entitlement process was a dispute between the City's Planning Department and other City departments. The Engineering Department, which reviews traffic reports, did not want the additional traffic impact it saw being generated by a denser project, and the Building Department was concerned about public safety risks it considered would result from the narrower streets typical of TOD and New Urbanist development. Resolving these disputes in favor of TOD design added considerable time to entitlements processing (and in fact cost the developer the time savings that it had hoped to gain by assisting with the light rail route and supporting the City's TOD design policies).

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<sup>i</sup> Planning entitlements were based on Average Daily Trips (ADT) in order to allow developers to reallocate land uses and development densities to better respond to changes in market conditions. ADTs are based on larger Development Density Districts and can be banked within those districts and transferred to other properties within the same District.

<sup>ii</sup> CalMat subsequently transferred some of the associated ADT allowance to an adjacent property that it owns but that is not part of the Rio Vista West project.

### **Development Cost and Financing**

The total value of all project components is estimated to be approximately \$175 million. All project components are market-rate and have been privately financed by the various developers. CalMat financed and constructed all backbone street and infrastructure improvements for the project.

### **Design**

TOD Guidelines were adopted for this project at the request of the developer pursuant to City policy that provides a framework for their creation, in order to provide specific guidance to developers on design requirements.

When changes in market conditions resulted in the development of a big-box center on the retail parcel, the TOD Guidelines provided a framework to incorporate as many design features as possible that would support transit, given the challenges of siting and parking posed by such a project.

### **Market**

Mission Valley is an active sub-market of San Diego, with numerous residential and commercial projects completed in the last few years. The market for the residential units now under construction is considered to be strong.

However, retail market conditions proved more challenging. Due to changes in retail development patterns, the specialty retail center originally envisioned for the site proved infeasible. A big-box retail project did prove to be feasible and was built on the retail portion of the project.

### **Lessons Learned**

From the developer's perspective, the key lesson was how its efforts to meet City objectives for TOD, as established by the Planning Department, could result in significant delay in entitlements processing when other City departments, such as Engineering and Building, objected to TOD and New Urbanist design. In hindsight, the developer considers this a penalty it experienced for being the pioneer in the approvals process for a project designed under the City's then-new TOD Guidelines.

### **TOD Aspect**

Rio Vista West is an example of how a large master developer can make contributions (in the form of land) to facilitate the routing of transit and stations to benefit its project, and establish design requirements so that individual project developers support overall TOD goals. At the same time, the lengthy time frame associated with such a large project illustrates how changes in real estate markets can render previously adopted plans obsolete or require major design changes even without a change in land use (i.e. constructing a big-box vs. a specialty retail shopping center). As the first major project implementing the City's new TOD Guidelines, internal disputes arose between City Departments based on different objectives (i.e. TOD design vs. wide roads for fire truck access) that required significant time and effort to resolve.

## Appendix III to Chapter 6: The Effect of Rail Transit on Property Values - A Summary of Studies

**Primary author of this section: Parsons Brinckerhoff consultants**

### Introduction

A good transit system provides a high level of access to work and other activities for households and to customers and employees for businesses. The monetary value of this access will be reflected in the value of a home or a business, in addition to the value of other features such as the specific physical attributes of the building and neighborhood characteristics. This paper reviews recent studies on rail transit's effect on property values. A matrix with the key findings of the major studies carried out over the last ten years can be found in the last section.

The impact of rail transit on property values has been studied from many perspectives, including analyses of different types of systems (e.g., rapid, commuter, light rail), analyses of residential versus commercial impacts, and studies that have attempted to isolate both positive and negative effects. The varied approaches make it difficult to compare the results of one study to another. Further, some of the contradictory results over the years have often been due to differing methods of analysis, data quality, and regional differences. Nevertheless, it is clear that in most cases access to rail systems is valued by property owners and there is little support for the suggestion that proximity to rail actually *decreases* property values.

This research was originally prepared in February 2001 for the NEORail II project in Cleveland, Ohio.

### Types of Impacts

Evidence for rail's influence on residential property values has been demonstrated more clearly than for commercial uses (Nelson 1998). However, this is due more to data and analysis difficulties than to a lack of effect. Landis et al. (1995) note three reasons for the problem: (1) a lack of comprehensive and reliable data; (2) a smaller zone of impact that limits the number of observations; and, (3) while housing values are determined in the marketplace, the values of individual commercial transactions may represent only the value of one pair of buyers and sellers. More recent studies have attempted to correct earlier analysis problems (Weinberger 2001 and 2000, FTA 2000) and have found statistically significant and positive impacts of light rail (Weinberger) and rapid rail (FTA) on commercial properties. It is likely that the magnitude of the impact on commercial property values will vary according to:

- ▶ The degree to which accessibility is improved,
- ▶ The relative attractiveness of the locations near the station area, and
- ▶ The real estate market in the region (Parsons Brinckerhoff 1999).



It has been theorized that proximity to a rail *line* would have a negative impact on residential property values, due to nuisance effects such as noise and vibration. The nuisance effect has not been conclusively supported, however. Two separate studies, one that focused on proximity to Portland, Oregon's light rail line (Chen et al. 1998), and one that looked at proximity to BART lines (Landis et al. 1995) did not find statistically significant nuisance effects. However, Landis et al. did find an indication of a nuisance effect for houses adjacent to the CalTrain commuter line in San Mateo County. The authors speculate that the 'disamenity' for CalTrain was "probably a function of noise levels that are much higher than BART's" (pg. 38). Further, they suggest that because the "CalTrain trackbed is minimally separated from adjacent uses, and given that the CalTrain train cars are not specifically designed for quiet operation, this is not a surprising finding" (pg. 42). Thus, the problem of nuisance effects is one that can be minimized or negated through good system design.

There is evidence that rapid and commuter rail systems have a greater impact on property values than do light rail transit (LRT) systems (Cervero 1984), due to rapid and commuter rail's higher speeds and greater regional access. The increase in service characteristics gives rapid and commuter rail a greater "sphere of influence" while for LRT, "fewer land parcels can turn gains in accessibility into higher land values" (pg. 134). However, Landis et al. (1995) found equally strong impacts on housing values for BART (a rapid rail system) and for the San Diego Trolley (a light rail system) due to the equally high quality of service these two systems provide. Thus, capitalization benefits depend on "reliable, frequent, and speedy service" to a large market area (pg. 42). In one of the few analyses to look at commuter rail in particular, Armstrong (1994) studied the impact of Boston's Fitchburg line on residential property values, both in terms of amenity and nuisance values. Armstrong found that homes located within census tracts that have rail stations commanded a 6.7 percent premium for home sale prices. When he looked at the effect of proximity to the rail line itself (measured as a home being within 400 feet of the line), Armstrong found an approximate 20 percent decrease in value. He cautions that firm conclusions cannot be drawn from this finding due to the fact that the commuter rail line shares right-of-way with a freight system along this line. "The fact that both freight rail service and commuter rail service operate upon the Fitchburg line . . . makes it difficult if not impossible to accurately differentiate between the two separate sources of proximity impacts. Therefore, the findings concerning the effects of commuter rail generated proximity impacts, independent of freight rail generated proximity impacts, are inconclusive" (pg. 26).

As noted above, property value impacts tend to be highly localized around rail stations (particularly for commercial uses), which suggest that great attention must be given to the location of stations and the policies that guide development around them. The next section reviews these policies.





## Other Influences

Development does not occur automatically. Importantly, policy and institutional factors, the land market, and the overall economic climate will ultimately determine whether or not transit will positively impact property values and land development. Previous work has identified a veritable laundry list of important policies and tools, and we suggest that the following deserve special emphasis:

### *Regional tools:*

- ▶ Keeping urban growth and development in desired areas with such tools as urban growth boundaries, agricultural reserves, and greenbelts will help to increase the amount and intensity of development in station areas, which will in turn help to increase ridership.
- ▶ Development guidelines that locate major activity centers, government facilities, and residential uses on transit lines will support higher levels of ridership.
- ▶ Development of a regional vision that puts transit first.
- ▶ Automobile restraint programs, such as restricting parking supply will encourage transit use by increasing the cost of using automobiles.

### *Station-area tools:*

- ▶ Innovative zoning, such as density bonuses, mixed-use zoning, and transfer of development rights will facilitate the type of development that will best serve a transit-using public.
- ▶ Design guidelines that emphasize a pedestrian-friendly (and pedestrian-interesting) and a “human-scaled” environment are crucial to the creation of station areas that people will enjoy being in.
- ▶ Strategic selection of station areas that will take full advantage of land availability, development and/or redevelopment potential and local demand.

## SUMMARY of STUDIES: RAIL TRANSIT'S EFFECTS ON PROPERTY VALUES<sup>i</sup>

### Rapid/Commuter Rail:

Location, (Author, Year Published)	Rail System	Type of Property Studied	Result	Comments <sup>1</sup>
<b>Washington, D.C.</b> (FTA 2000)	Rapid rail: Metro	Commercial	Price per square foot decreases by about \$2.30 for every 1,000 feet further from station.	City-wide analysis of over 2,800 commercial properties. Access measured as ground distance to nearest Metro station.
<b>Atlanta</b> (Nelson 1998)	Rapid rail: MARTA	Commercial	Price per square meter falls by \$75 for each meter away from transit stations. Price rises by \$443 for location within special public interest districts.	City-wide analysis measuring access as ground distance to a MARTA station. Study also looked at the effects of special policy districts.
<b>San Francisco</b> (Lewis-Workman and Brod 1997)	Rapid rail: BART	Residential	Average home prices decline by about \$1,578 for every 100 feet further from station.	Study area defined as one-mile radius from a single station area (Pleasant Hill). Access measured as ground distance to station
<b>New York</b> (Lewis-Workman and Brod 1997)	Rapid rail: New York City MTA	Residential	Average home prices decline by about \$2,300 for every 100 feet further from the station areas.	Study area defined as one-mile radius from three different station areas (Forest Hills, 67 Avenue, and Rego Park). Access measured as ground distance to station.
<b>San Francisco Bay Area</b> (Landis et al. 1995)	Rapid rail: BART	Residential and Commercial	1990 single-family home prices decline by \$1.00 to \$2.00 per meter of distance from a BART station in Alameda and Contra Costa Counties. Found no effect for commercial property.	For residential study, measured ground distance to BART stations. Also looked at nuisance values of being adjacent to line and found none. Commercial property observations have significant data problems
<b>San Francisco Bay Area</b> (Landis et al. 1995)	Commuter rail: CalTrain	Residential	Did not find a significant impact on house values from proximity to a rail station. Houses within 300 meters of a CalTrain right-of-way sold at a \$51,000 discount.	Access measured as ground distance to nearest station.

<sup>i</sup> Refer to References to this Appendix, at the end of this section, for sources used in this table.

**Rapid/Commuter Rail, continued\***

<b>Location, (Author, Year Published)</b>	<b>Rail System</b>	<b>Type of Property Studied</b>	<b>Result</b>	<b>Comments<sup>1</sup></b>
<b>Washington, D. C.</b> (Benjamin and Sirmans 1996)	Rapid rail: Metro	Residential, Apartment Rents	Rents decrease by 2.4 to 2.6% for each one-tenth mile increase of distance from a Metro station.	Study looked at over 250 rental observations from 81 apartment complexes. Access measured ground distance to nearest station.
<b>Boston</b> (Armstrong 1994)	Commuter rail: MBTA, Fitchburg Line	Residential	Single-family residences located in communities that have a rail station have a market value approximately 6.7% greater than those that do not. Also found a property value loss of about 20% for properties located within 400 feet of a commuter or freight rail right-of-way.	Study area was defined as municipalities that fell more than 50% within an area approximately 10 miles from line. Study focused on station areas as well as right- of-way (nuisance) impacts. The nuisance impact may be the result of proximity to freight rail rather than commuter rail.
<b>Los Angeles</b> (Fejarang et al. 1994)	Rapid rail: Metro Rail	Commercial	Commercial space within ½-mile of the rail corridor had an additional \$31 increase in mean sale price per square feet over the mean sales price of a comparable control group outside of the rail corridor, between 1980 and 1990.	Studied the effects of the announcement of coming rail service using a test and control group method to compare properties within the corridor to similar ones without.
<b>Philadelphia</b> (Voith 1993)	Rapid rail: SEPTA	Residential	Finds a premium for single-family homes with access to rail stations of 7.5 to 8.0% over the average home value.	Access to rail defined according to proximity of a given house to train service, measured in census tracts.

\* References for sources listed in this chart are provided at the end of this section.

**Light Rail Transit:\***

Location, (Author, Year Published)	Facility Characteristics	Type of Property Studied	Result	Comments <sup>1</sup>
<b>Santa Clara, County</b> (Weinberger 2001, 2000; Cambridge Systematics, Inc. 1999)	LRT: Guadalupe line	Commercial	Commercial space within a ¼-mile of a station received an average of 2.3¢ to 5.0¢ more per square foot than space located more than ¾-mile from a station. Office space sold within a ¼-mile of a station received an average of \$4.87 per square foot more per gross building square foot compared to space located more than ¾-mile from a station.	Countywide analysis. Access to transit measured as ¼-mile distance rings.
<b>Portland</b> (Dueker and Bianco 1999)	LRT: MAX, Eastside line	Residential	Median house values increase at increasing rates as move toward an LRT station. The largest price difference (\$2,300) occurs between the station and 200 feet away.	Study used a test and control group method to compare property values along a parallel bus corridor to those along the rail line.
<b>Portland</b> (Chen et al. 1998)	LRT: MAX, Eastside line	Residential	Beginning at a distance of 100 meters from the station, each additional meter away from decreases average house price by \$32.20.	Update of the 1993 study, with a slightly altered study area (including extending the area of influence to 1000 meters)
<b>Portland</b> (Lewis-Workman and Brod 1997)	LRT: MAX, Eastside line	Residential	On average, property values increase by \$75 for every 100 feet closer to the station (within the 2,500 ft. – 5,280 ft. radius).	Study area defined as the area within a one-mile radius, but 2,500 feet away, from three station areas (148 <sup>th</sup> Ave., 162 <sup>nd</sup> Ave., and 172 <sup>nd</sup> Ave.). Access measured as ground distance to stations.
<b>Portland</b> (Knaap et al. 1996)	LRT: MAX, Westside line	Residential	The values of parcels located within ½-mile of the line rise with distance from the lines, but fall with distance from the stations.	Study looked at property values in advance of the Westside LRT beginning operations. Study area included land within two to three miles of the line in Washington County. Access measured as ½-mile distance ring.
<b>San Diego</b> (Landis et al. 1995)	LRT: San Diego Trolley	Residential and Commercial	The typical home sold for \$272 more for every 100 meters closer to a light rail station. No effect found for commercial impacts	City-wide analysis, access based on ground distance to station

\*References for sources listed in this chart are provided at the end of this section.

**Light Rail Transit, continued**

<b>Location, (Author, Year Published)</b>	<b>Facility Characteristics</b>	<b>Type of Property Studied</b>	<b>Result</b>	<b>Comments<sup>1</sup></b>
<b>Sacramento</b> (Landis et al. 1995)	LRT: Sacramento Light Rail	Residential	No effects found	City-wide analysis, access based on ground distance to station
<b>San Jose</b> (Landis et al. 1995)	LRT: San Jose Light Rail	Residential	The typical house was worth \$197 less for every 100 meters it was closer to light rail.	City-wide analysis, access based on ground distance to station. Light rail located in commercial, industrial area. Nearby homes are older and serve lower income households.
<b>Portland (Al-Mosaind et al. 1993)</b>	LRT: MAX, Eastside	Residential	The typical house sold for \$663 more for every 100 feet nearer a light rail station.	Study conducted in suburban residential area with seven stations. Only home sales within walking distance (1/4-mile) of stations were analyzed.

<sup>1</sup> Three methods of measuring distance are referred to in this column. "Ground distance" refers to the distance traveled on the ground (i.e., by walking, riding a bike, or driving). This is contrasted to "air distance" which measures a straight-line from the property in question to the transit station. This second method is less precise in measuring actual access to stations. A third method involves the use of rings circling a transit station (usually divided into 1/4- and 1/2-mile segments). All properties within each ring are considered as having the same access.

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## Appendix IV to Chapter 6: Market Performance of Multi-family Housing in California Cities with Rail Transit

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### Background:

Market issues related to higher housing densities in TODs are often raised, particularly in areas where multi-family housing has not been as readily accepted as single-family houses.

In spite of this, there are general indications that demand for rental multifamily housing within larger California cities is very strong. Regional profiles for multifamily rental market conditions are provided below for several large cities with rail transit service, including: the Los Angeles, San Diego, San Francisco, and Sacramento areas. (These data were current as of mid-2001 and will continually change over time.)

It should be noted, however, that the strong occupancy rates and rental rate increases do not necessarily mean that new apartment units can be created in a financially feasible manner in these urban housing markets. In many parts of Los Angeles, San Francisco, and San Diego, the cost of land and construction compared to the value created by newly built rental income property is not always economically balanced enough to create sufficient profit for the developer. In other words, while rents have risen, in many cases, rents are still not high enough to support the cost of a newly constructed market rate rental project, leading to further shortages and strong occupancy rates.

**Los Angeles** – According to data from *RealFacts*<sup>66</sup> for the 1<sup>st</sup> Quarter of 2001, a survey of nearly 20,000 apartment units indicates that occupancy rates continue to rise. Between 1<sup>st</sup> Quarter 2000 and 1<sup>st</sup> Quarter 2001, overall occupancy rose from 96.9 to 97.5 percent. Housing analysts consider occupancy rates above 96 percent to be strong. Average rental rates also rose 14.5 percent between these two periods, with average rental rates at \$1,288 per month at the end of 1<sup>st</sup> Quarter, 2001.

**San Diego** – An inventory of 26,000 units in San Diego also indicated a very strong apartment housing market. Between 1<sup>st</sup> Quarter 2000 and 1<sup>st</sup> Quarter 2001, occupancy increased from 96.6 to 97.1 percent. Average rental rates also rose 11.9 percent between these two periods, with average rental rates at \$1,185 at the end of 1<sup>st</sup> Quarter, 2001.

**San Francisco** – For San Francisco, a survey of 14,200 units showed the strongest apartment market of any major California city, although occupancies are dipping slightly. Between 1<sup>st</sup> Quarter 2000 and 2001, occupancy declined from an extraordinary peak of 98.2 percent to 96.8 percent. During the same period, average rents rose 23.5 percent, to a 1<sup>st</sup> Quarter 2001 average of \$2,316. More recent raw data published in Spring 2001 suggests that San Francisco rents may be flattening or even declining from their peak, due to a softening economy.

**Sacramento** – For Sacramento, an inventory of 5,750 rental units also showed an increasingly strong apartment market. Between 1<sup>st</sup> Quarter 2000 and 2001, Sacramento's occupancy rate increased from 96.2 to 98.0 percent. Rents also rose at a rate of 12.0 percent for the period, with average rental rates of \$746 at the end of 1<sup>st</sup> Quarter 2001.



## Appendix to Chapter 7: Funding Sources for TOD

**Primary authors of this section: Scott Polzin and GB Arrington,  
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This appendix provides one-page summaries of various federal, state, local/regional, and private funding programs available to governmental agencies, nonprofit organizations and for-profit developers that may be used as sources to finance TODs. These provide more in-depth information in regard to the funding sources that are listed in Chapter 7 of the “Statewide Transit-Oriented Development Study” final report.

## Federal Programs

### American Communities Fund (ACF)<sup>i</sup>

Administering Agency: Fannie Mae

Summary: The mission of the American Communities Fund (ACF) is to invest in tangible, high-impact residential and neighborhood retail developments. ACF leverages the resources of the financial industry, for-profit and nonprofit developers, the federal government, and state and local governments to catalyze the revitalization of emerging neighborhoods and downtowns.

Eligible Activities include:

- Single family and multifamily developments
- Mixed-use and neighborhood retail developments

Eligible Applicants:

- Developers
- Not for profits
- City, state, and federal agencies

Investment vehicles:

- Equity investments
- Debt financing
- Historic tax credit investments

Notes:

- From its inception in 1996 through December 1999 the program invested \$286.1 million.
- In 2000, Fannie Mae increased ACF's capitalization and committed to invest up to \$3 billion over the next 10 years.

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<sup>i</sup> Unless otherwise noted, the American Communities Fund information presented on this page was taken from the "American Communities Fund, America's Partner in Community Development", Fannie Mae, 2000.

## **Brownfield Economic Development Initiative (BEDI)<sup>i</sup>**

Administering Agency: Department of Housing and Urban Development (HUD)

Summary: “Brownfields are abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”<sup>67</sup> BEDI grants, in conjunction with HUD Section 108 loans, may be used to revitalize these locations. In addition, BEDI grants enhance the security or improve the viability of a project financed with a Section 108 loan from HUD. BEDI grants must be used for the same economic development project as the Section 108 loan.

Eligible Activities include:

- Environmental cleanup of sites
- Acquisition of a brownfield property and conveyance to a private sector party at a discounted price
- Use as funding reserves
- Direct enhancement of the security of a Section 108 loan

Eligible Applicants:

- Community Development Block Grant (CDBG) entitlement communities
- CDBG non-entitlement communities eligible to receive loan guarantees

Notes:

- BEDI had approximately \$25 million available for distribution in FY01.<sup>68</sup>
- The maximum grant amount is \$2 million.
- The minimum BEDI to Section 108 ratio is 1:1.
- BEDI funds must meet one of the CDBG Program’s three national objectives.

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<sup>i</sup> Unless otherwise noted, BEDI Program information presented on this page was taken from the U.S. Department of Housing and Urban Development web page <http://www.hud.gov/bedifact.cfm>.

## Community Development Block Grant (CDBG) Program<sup>i</sup>

Administering Agency: U.S. Department of Housing and Urban Development (HUD)

Summary: The CDBG Program provides eligible metropolitan cities and urban counties (called “entitlement communities”) with annual direct grants that they can use to revitalize neighborhoods, expand affordable housing and economic opportunities, and/or improve community facilities and services, principally to benefit low- and moderate-income persons.

Eligible Activities include:

- Acquiring real property (primarily land, buildings, and other permanent improvements to the property) for public purposes
- Demolishing property and clear sites to prepare the land for other uses
- Reconstructing or rehabilitating housing and other property
- Building public facilities and improvements, such as streets, sidewalks, sewers, water systems, community and senior citizen centers and recreational facilities
- Assisting for-profit businesses for special economic development activities

Eligible Applicants:

- Local governments with 50,000 or more residents
- Other local governments designated as central cities of metropolitan areas
- Urban counties with populations of at least 200,000

Notes:

- Approximately \$4.4 billion was available for distribution in FY01; 70% going to entitlement communities, 30% going to State CDBG programs for distribution to non-entitlement communities.<sup>69</sup>
- Local governments may carry out all activities themselves or award some or all of the funds to private or public nonprofit organizations as well as to for-profit entities.

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<sup>i</sup> Unless otherwise noted, CDBG Program information presented on this page was taken from the U.S. Department of Housing and Urban Development web page [www.hud.gov/progdsc/cdbgent.cfm](http://www.hud.gov/progdsc/cdbgent.cfm).



## **Congestion Mitigation and Air Quality (CMAQ) Improvement Program<sup>i</sup>**

Administering Agency: Federal Highway Administration (FHWA)

Summary: Congestion Mitigation and Air Quality (CMAQ) Improvement Program funds are directed to transportation projects and programs that contribute to the attainment or maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas.

Eligible Activities include:

- Public transit improvements
- Fringe parking facilities serving multiple occupancy vehicles
- Bicycle and pedestrian facilities
- Fare/fee subsidy programs

Eligible Applicants:

- State Department of Transportation
- Metropolitan Planning Organizations
- Regional Transportation Planning Agencies

Notes:

- The estimated annual program level for the state of California is \$360 million.
- Projects that consistently reduce all trips and not just one type of trip are viewed favorably and have a greater chance of receiving funds.<sup>70</sup>
- Under TEA-21 “states were given more flexibility to form public/private partnerships on projects utilizing CMAQ funds.”<sup>71</sup>

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<sup>i</sup> Unless otherwise noted, CMAQ Program information presented on this page was taken from: “Transportation Funding Opportunities – State and Federal Funds Available for Local Agency Projects”, State of California Department of Transportation, Local Assistance Program, Office of Procedures Development, January 2001.

## Economic Development Initiative (EDI)<sup>i</sup>

Administering Agency: Department of Housing and Urban Development (HUD)

Summary: EDI provides grants to local governments that can be used to enhance both the security of loans guaranteed through the Economic Development Loan Fund (Section 108 loans) from HUD and the feasibility of the large economic development and revitalization projects they finance. EDI grants are only administered in conjunction with Section 108 loans.

Eligible Activities include:

- Property acquisition
- Rehabilitation of publicly owned property
- Housing rehabilitation
- Economic development activities
- Acquisition, construction, reconstruction, or installation of public facilities
- Public works or other site improvements

Eligible Applicants:

- States
- Community Development Block Grant (CDBG) entitlement communities
- CDBG non-entitlement communities

Notes:

- EDI had approximately \$10.7 million available for distribution in fiscal year 2001.<sup>72, ii</sup>
- Local governments may use an EDI grant to provide additional security for a Section 108 loan, thereby reducing the exposure of its CDBG funds in the event of a default in loans made locally with the funds.
- EDI grants along with Section 108 loans have been most often used to encourage economic development.

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<sup>i</sup> Unless otherwise noted, EDI Program information presented on this page was taken from the U.S. Department of Housing and Urban Development web page [www.hud.gov/progdsc/edi.cfm](http://www.hud.gov/progdsc/edi.cfm).

<sup>ii</sup> The Federal fiscal year runs from October 1 to the following September 30.

## **Federal Transit Act Section 5309 Grant Program – New Rail Starts<sup>i</sup>**

Administering Agency: Federal Transit Administration (FTA)

Summary: Section 5309 provides funding directly to public transit operators to finance capital improvements. The funds are discretionary and vary annually.

Eligible Activities:

- Purchase of rail cars and equipment
- New rail systems and line extensions
- Improvement and maintenance of existing rail transit
- Acquisition of ancillary equipment and the construction of facilities
- Track and right-of-way rehabilitation

Eligible Applicants:

- Public transit operators

Notes:

- Congress apportions Section 5309 funds.
- Section 5309 funds require matching state and local funds.
- In 1997, the FTA developed new guidelines for choosing among competing projects that give increased emphasis on transit-supportive land use planning.<sup>73</sup>

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<sup>i</sup> Unless otherwise noted, the Section 5309 Grant Program information presented on this page was taken from the North Carolina Department of Transportation web page, [www.dot.state.nc.us/transit/transitnet/PublicInfo/TransitFinance/Grants/5309.html](http://www.dot.state.nc.us/transit/transitnet/PublicInfo/TransitFinance/Grants/5309.html).

## HOME Investment Partnerships Program<sup>i</sup>

Administering Agency: Department of Housing and Urban Development (HUD)

Summary: HOME encourages participating jurisdictions to design and implement affordable housing strategies that are tailored to their needs and priorities. It extends and strengthens partnerships among all levels of government and the private sector, including for-profit and nonprofit organizations, in the production of affordable housing.

Eligible Activities include:

- Projects that develop and support affordable rental housing and homeownership affordability through the acquisition, new construction, reconstruction, or rehabilitation of non-luxury housing with suitable amenities.
- Real property acquisition
- Site Improvements, conversion, demolition, and other expenses

Eligible Applicants:

- States
- Cities
- Urban counties
- Consortia

Notes:

- The program had approximately \$1.21 billion available in FY01.<sup>74, ii</sup>
- “Home is the largest federal block grant program whose focus is providing affordable housing opportunities”.<sup>75</sup>
- Matching funds may be required depending on the specific project activities.

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<sup>i</sup> Unless otherwise noted, HOME Program information presented on this page is from the U.S. Department of Housing and Urban Development (HUD) grant program inventory found on web page <http://mf.hud.gov:63001/dgms/spi/display.cfm?program=34>.

<sup>ii</sup> The Federal fiscal year runs from October 1 to the following September 30.

## HOPE VI<sup>i</sup>

Administering Agency: Department of Housing and Urban Development (HUD)

Summary: HOPE VI helps transform the physical and social environment for low-income residents of severely distressed public housing. HOPE VI encourages public housing authorities to seek new partnerships with private organizations to create mixed-finance and mixed-income affordable housing that is radically different from traditional public housing “projects”. The new communities built under HOPE VI embrace design principles, such as mixed-use and mixed-income, that foster community building and livability in ways not possible in the previously existing developments.

Eligible Activities include:

- Demolition or disposition of severely distressed public housing
- Rehabilitation, redesign, or reconfiguration of severely distressed public housing
- New construction of replacement rental housing
- Replacement homeownership housing
- Administration, planning, and technical assistance

Eligible Applicants:

- Public housing authorities

Notes:

- HOPE VI had approximately \$565 million available (\$490 million for revitalization grants and \$75 million for demolition grants) for distribution in FY01.<sup>76, ii</sup>
- Applicants may request up to \$35 million for revitalization grants.
- HOPE VI “promotes sustainable, pedestrian-friendly, transit-oriented developments that are safe and accessible for all”.<sup>77</sup>

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<sup>i</sup> Unless otherwise noted, HOPE VI Program information presented on this page is from the Livable Communities Resource Center web page, [www.livablecommunities.gov/toolsandresources/bh\\_hopevi.htm](http://www.livablecommunities.gov/toolsandresources/bh_hopevi.htm).

<sup>ii</sup> The Federal fiscal year runs from October 1 to the following September 30.

## New Markets Tax Credit <sup>i</sup>

Administering Agency: Department of the Treasury

Summary: The New Markets Tax Credit “will spur the investment of \$15 billion in new private capital into a range of privately managed investment vehicles that make loans and equity investments” <sup>78</sup> in an eligible “community development entity” (CDE). “A number of pioneering community-based institutions has demonstrated track records in finding viable market opportunities in areas often overlooked by traditional investors. By increasing their capital base, this tax credit will enable CDEs to lend and invest more, to attract additional outside capital, and to bring even more private sector engagement to their market-priming activities.” <sup>79</sup>

Eligible Investments may take the form of:

- Equity and Debt
- Certain financial counseling
- Certain transactions with other CDEs

Demographics of Investment Areas: At least 85% of investments must be in low-income communities, including:

- Areas measured by poverty: poverty rates of 20% or higher
- In metropolitan areas, median family income at or below 80% of statewide or metropolitan median income
- In other areas, with median income at or below 80% of statewide median income

Benefits:

- Maximum appropriations are anticipated to be \$15 billion between 2001 and 2007 (2001 = \$1 billion; 2002-2003 = \$1.5 billion/year; 2004-2005 = \$2 billion/year; 2006-2007 = \$3.5 billion/year).

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<sup>i</sup> Unless otherwise noted, the New Markets Tax Credit information presented on this page was taken from the Community Development Venture Capital Alliance, “New Markets”, web page, [www.cdvca.org/markets.html](http://www.cdvca.org/markets.html).



## **New Markets Venture Capital Program <sup>i</sup>**

Administering Agency: Small Business Administration

Summary: “New Markets Venture Capital (NMVC) companies will be newly formed, for-profit investment funds with private management. Their objective will be to promote economic development and the creation of wealth and job opportunities in low-income geographic areas and among individuals living in such areas.”<sup>80</sup>

Eligible Investments may take the form of:

- Equity (common and/or preferred stock)
- Subordinated debt with equity features

Demographics of Investment Areas: At least 80% of investments must be in low-income areas, including:

- Areas measured by poverty: poverty rates of 20% or higher
- In metropolitan areas, at least half of households with income at or below 60% of area median income
- In other areas, with median income at or below 80% of statewide median income

Benefits:

- The maximum appropriations for fiscal years 2001-2006 are anticipated to be \$150 million in debenture guarantees and \$30 million in operational assistance grants.
- “The Small Business Administration will provide NMVC companies with matching investment funds in the form of SBA-guaranteed deferred payment debentures, and matching operational assistance funding in the form of grants.”<sup>81</sup>
- Debentures of 5 or 10 years will be issued at a discount, so that cash proceeds approximately equal private capital.

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<sup>i</sup> Unless otherwise noted, the New Markets Venture Capital Program information presented on this page was taken from the Community Development Venture Capital Alliance, “New Markets”, web page, [www.cdvca.org/markets.html](http://www.cdvca.org/markets.html).

## Section 108 Loan Guarantee Program<sup>i</sup>

Administering Agency: Department of Housing and Urban Development (HUD)

Summary: Section 108 enables States and local governments participating in the Community Development Block Grant (CDBG) program to obtain federally guaranteed loans that can help fuel large economic development projects and other revitalization activities.

Eligible Activities include:

- Property acquisition
- Rehabilitation of publicly owned property
- Housing rehabilitation
- Economic development activities
- Acquisition, construction, reconstruction, or installation of public facilities
- Public works and other site improvements

Eligible Applicants:

- CDBG entitlement communities
- CDBG non-entitlement communities (provided that their State agrees to pledge the CDBG funds necessary to secure the loan)

Notes:

- For FY01, HUD is authorized to guarantee up to \$1.26 billion under this program.<sup>82</sup>
- The guaranteed amounts must not exceed five times a community's or State's most recent CDBG allocation.
- Section 108 loans are not risk free: local governments pledge their current and future CDBG allocations (up to the loan amount) as security for the loan.
- Loan guarantees must: (1) benefit low- and moderate-income families; (2) prevent or eliminate slums or blight; or (3) meet other urgent community development needs.

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<sup>i</sup> Unless otherwise noted, Section 108 Loan Guarantee Program information presented on this page was taken from the U.S. Department of Housing and Urban Development web page, [www.hud.gov/progdesc/cdbg-108.cfm](http://www.hud.gov/progdesc/cdbg-108.cfm).

## Short-Term Planning Grants<sup>i</sup>

Administering Agency: Economic Development Administration (EDA)

Summary: Planning grants provide support for significant new economic development planning, policymaking and implementation efforts, and establish comprehensive economic development planning processes cooperatively with the state, the state political subdivisions, and economic development districts.

Eligible Activities include:

- Preparation and maintenance of a continuous comprehensive economic development planning process
- Coordination of multi-jurisdictional planning efforts
- Diversification of the local economic base and implementation of programs, projects and procedures designed to create and retain permanent jobs and increase incomes

Eligible Applicants:

- State and local governments
- Regional economic development districts
- Public and private nonprofit organizations

Notes:

- The Short Term Planning Grants program had \$3.6 million available for distribution in FY 2000.
- The average grant amount in FY 1999 was \$61,000.
- EDA assistance is limited to 12 months and may be extended up to 36 months.
- One objective of the EDA investments is to provide a source of capital to help fund modern, innovative, and critical infrastructure and business finance projects that can help communities move forward.

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<sup>i</sup> Unless otherwise noted, the Short Term Planning Grants information presented on this page was taken from the Economic Development Administration's "Program Guide", U.S. Department of Commerce.

## Surface Transportation Program (STP)<sup>i</sup>

Administering Agency: Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)

Summary: The Surface Transportation Program (STP) funds are directed to projects and programs for a broad variety of transit and highway (including streets and roads) work.

Eligible Activities include:

- Highway projects
- Transit capital improvements
- Carpool, parking, bicycle and pedestrian facilities
- Safety improvements and hazard elimination
- Research
- Wetland and other environmental mitigation

Eligible Applicants:

- Cities and counties
- Transit Operators
- State Departments of Transportation

Notes:

- The estimated annual program level for the State of California is \$320 million.
- The STP apportionment is distributed among the urbanized and non-urbanized areas of California through Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs).
- Projects are proposed for selection by RTPAs and MPOs in cooperation with the State. Projects must be included in an approved Federal Statewide Transportation Improvement Program (FSTIP).

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<sup>i</sup> Unless otherwise noted, Surface Transportation Program (STP) information on this page was taken from the “Transportation Funding Opportunities – State and Federal Funds Available for Local Agency Projects” prepared by the State of California Department of Transportation, Local Assistance Program, Office of Procedures Development, January 2001.

## Tax Credits – Low Income Housing<sup>i</sup>

Administering Agency: State Tax Credit Allocating Agencies

- Summary: The Federal credit program “replaced traditional housing tax incentives, such as accelerated depreciation, with a tax credit that enables low-income housing sponsors and developers to raise project equity through the sale of tax benefits to investors”.

Eligible Activities include:

A project must meet two fundamental requirements to be considered a qualified low-income housing project.

1. It must be residential property. Residential rental requirements include:
  - Functionally related facilities
  - Scattered site project
  - Mixed-use building
  - General public use
2. It must meet the minimum low-income set-aside requirement. One of the following set-aside tests must be fulfilled:
  - 20/50 Test
  - 40/60 Test
  - New York City Test
  - Deep Rent Skewed Test

Eligible Applicants:

- Developers of low-income housing

Notes:

- The credits available include the “9%” tax credit and the “4%” tax credit.

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<sup>i</sup> Unless otherwise noted, the Low Income Tax Credit information presented on this page was taken from the “Low Income Tax Credit”, U.S. Internal Revenue Service, web page, [www.irs.gov/prod/bus\\_info/mssp/lihc-1.html](http://www.irs.gov/prod/bus_info/mssp/lihc-1.html).

## Technical Assistance Grant (TAG) Program <sup>i</sup>

Administering Agency: Economic Development Administration (EDA)

Summary: The Technical Assistance Program helps fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in distressed areas from making optimal decisions on local economic development issues.

Eligible Activities include:

- Supporting feasibility studies on potential economic development projects
- Revitalization plans
- Economic development conferences or seminars
- Establishment of geographic information systems for local planning and development purposes

Eligible Applicants:

- Local communities
- Regional organizations
- Nonprofit organizations

Notes:

- The Technical Assistance Program had \$1.5 million available for distribution in FY 2000.
- The average grant amount in FY 1999 was \$28,000.
- The Technical Assistance Program grants provide local leaders with a thorough basis for making informed economic development decisions.
- The strength of the program is its flexibility to support a variety of activities that address local economic development needs.

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<sup>i</sup> Unless otherwise noted, the Technical Assistance Grant Program information presented on this page was taken from the Economic Development Administration's "Program Guide", U.S. Department of Commerce, web page, [www.doc.gov/eda/pdf/GPO26198.pdf](http://www.doc.gov/eda/pdf/GPO26198.pdf).



## Transportation and Community and System Preservation (TCSP) Pilot Program<sup>i</sup>

Administering Agency: Federal Highway Administration (FHWA)

Summary: “The TCSP Program provides funds for planning and implementation grants, technical assistance and research to investigate and address the relationship between transportation; community and system preservation; and private sector-based initiatives”.<sup>83</sup>

Eligible Activities include:

- Transit-oriented development projects
- Traffic-calming measures
- Projects to reduce the need for future infrastructure investments

Eligible Applicants:

- States and local governments
- Metropolitan planning organizations (MPOs)

Notes:

- “TEA-21 authorized TCSP funding in the amount of \$25 million per year for FYs 2000 through 2003. However, actual TCSP Program funding levels can vary based on Congress’ annual appropriations.”<sup>84</sup>
- “On October 27, 2000, 80 FY2001 TCSP Program grants in 34 States totaling \$46.9 million were awarded. All 80 of these projects were designated by Congress.”<sup>85</sup>
- The program “focuses on tools and resources to preserve green space, ease traffic congestion, and pursue regional ‘smart growth’ strategies”.<sup>86</sup>

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<sup>i</sup> Unless otherwise noted, the Transportation and Community and System Preservation (TCSP) Pilot Program information presented on this page was taken from “Moving Costs, A Transportation Funding Guide for the San Francisco Bay Area”, Metropolitan Transportation Commission, Spring 2000.

## California State Programs

### Bicycle Transportation Account (BTA) Program<sup>i</sup>

Administering Agency: California Department of Transportation

Summary: The Bicycle Transportation Account (BTA) is intended to provide funds for bicycle transportation, which is recognized as an important and low cost mode of public transportation. It provides funds to local agencies for projects that improve safety and convenience for bicycle commuters.

Eligible Activities include:<sup>87</sup>

- Bicycle path, lane, or route construction and maintenance
- Lockers
- Racks on transit vehicles
- Planning
- Safety education

Eligible Applicants:

- Cities with an adopted Bicycle Transportation Plan
- Counties with an adopted Bicycle Transportation Plan

Notes:

- BTA annual funding is \$7.2 million per fiscal year from 2001/02 thru 2005/06.
- After FYs 2005/06, the annual funding budget is currently set at \$5 million.
- No applicant may receive more than 25% of the total funds transferred into the BTA in a single fiscal year.
- Applicants provide a local match of at least 10% of the total project cost.

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<sup>i</sup> Unless otherwise noted, the Bicycle Transportation Account Program information presented on this page was taken from the "Transportation Funding Opportunities – State and Federal Funds Available for Local Agency Projects", State of California, Department of Transportation, Local Assistance Program, Office of Procedures Development, January 2001.

## CalHome Program<sup>i</sup>

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: CalHome Program funds enable low- and very-low-income households to become or remain homeowners.

Eligible Activities include:

- Predevelopment
- Site Development
- Rehabilitation and new construction
- Acquisition and rehabilitation

Eligible Applicants:

- Local public agencies
- Nonprofit corporations

Notes:

- As of February 1, 2001, there was a combined total of \$44.5 million available in the various CalHOME components.<sup>88</sup>
- Grants to local public agencies or nonprofit corporations for first-time homebuyer downpayment assistance, home rehabilitation, acquisition and rehabilitation, homebuyer counseling, self-help mortgage assistance programs, or technical assistance for self-help and shared housing homeownership.
- Loans for real property acquisitions, site development, predevelopment, construction period expenses of homeownership development projects, or permanent financing for mutual housing and cooperative developments.

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<sup>i</sup> Unless otherwise noted, the CalHome Program information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## California Organized Investment Network (COIN)<sup>i</sup>

Administering Agency: California Organized Investment Network (COIN)

Summary: Established in 1995 as a collaborative effort between the insurance industry, the California Commissioner of Insurance, and advocates for investment in low-income communities, COIN's mission is to match entrepreneurs, nonprofit groups, either directly or through intermediaries, and local governments in low-income and rural areas with insurance industry investment capital.

Eligible investment products may be versions of:

- Debt
- Equity
- Credit enhancement

Eligible projects must satisfy the following investment principles:

- Provide safe, sound, solvent investments offering an acceptable financial return or its equivalent within the regulatory and National Association of Insurance Commissioners (NAIC) rating framework governing insurance company investments.
- Provide investments in or benefiting low-income and rural people or communities either directly or through intermediaries.
- Add value to capital products and programs currently available.

Eligible Applicants:

- Nonprofit organizations, local governments and business

Notes:

- The ultimate goal of the COIN effort is to increase the level of insurance industry investment in safe and sound investments for economic development and affordable housing in or benefiting low-income and rural communities.

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<sup>i</sup> Unless otherwise noted, the California Organized Investment Network (COIN) information presented on this page was taken from the "COIN Investment Guidelines", California Department of Insurance, web page, [www.insurance.ca.gov/COIN/Guides.htm.a](http://www.insurance.ca.gov/COIN/Guides.htm.a)

## **Child Care Facilities Finance Program (CCFFP) <sup>i</sup>**

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: Child Care Facilities Finance Program funds provide loan guarantees and direct loans for the development and/or expansion of childcare and development facilities, and family childcare homes serving more than six children.

Eligible Activities:

- Purchase, development, construction, expansion, or improvements of licensed childcare and child development facilities and related equipment and fixtures

Eligible Applicants: Recipients of Child Care Facilities Finance Program loans must provide licensed child care and/or child development services. Applicants may include:

- Sole proprietorships
- Partnerships
- Proprietary and nonprofit corporations
- Local public agencies

Notes:

- As of February 1, 2001 there was approximately \$9 million available in loan guarantees and \$15.25 million available in direct loans.<sup>89</sup>
- Direct loans can provide up to 50% of the total project investment, and have a below market fixed interest rate.
- Loan guarantees and direct loans have maximum 20-year terms.
- Borrowers must agree to provide childcare services for the term of the loan or guarantee.

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<sup>i</sup> Unless otherwise noted, the Child Care Facilities Finance Program information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## **Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program<sup>i</sup>**

Administering Agency: California Department of Toxic Substances Control

Summary: The CLEAN revolving loan fund was established to encourage development in distressed areas of the state by providing financing for environmental site assessments and environmental cleanup actions on urban Brownfields and underutilized properties.

Eligible Activities include:

- Environmental site assessments
- Environmental cleanup actions

Eligible Applicants:

- Local governments
- Private businesses
- Individuals
- Nonprofit organizations

Notes:<sup>90</sup>

- CLEAN is an \$85 million program.
- The program provides low-interest loans of up to \$100,000 to conduct preliminary endangerment assessments of urban Brownfields.
- If redevelopment of property is determined not to be economically feasible, up to 75% of the loan amount can be waived.
- The program provides low-interest loans of up to \$2.5 million for the cleanup or removal of hazardous materials at underutilized urban properties.

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<sup>i</sup> Unless otherwise noted, the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program information presented on this page was taken from the CLEAN Program Loan Application, January 2001, California Environmental Protection Agency, Department of Toxic Substances Control, web page, [www.dtsc.ca.gov/docs/admin/uclp/docs/CleanLoanPkg\\_20010102.pdf](http://www.dtsc.ca.gov/docs/admin/uclp/docs/CleanLoanPkg_20010102.pdf).



## Community Based Transportation Planning (CBTP) Grant Program

Administering Agency: California Department of Transportation

Summary: The Community Based Transportation Planning Grant (CBTP) Program provides funds for transportation/land use planning projects that support livable community concepts. Projects must have a defined transportation objective, and address a deficiency, conflict, or opportunity in coordinating land use and transportation planning. Project proposals must include a comprehensive public participation process, and must demonstrate the implementation of this process throughout the project.

Eligible Activities include: Planning projects that promote long-term sustainable economic growth, and/or improve mobility and transportation choices for a wider range of users. For example, projects that support:

- Transit-oriented development,
- Mixed-use development,
- Pedestrian/bicycle/transit linkages,
- Jobs and housing balance,
- Re-use or infill/compact development and/or community/economic development.

Eligible Applicants:

- Metropolitan Planning Organizations (MPOs), Regional Transportation Planning Agencies (RTPAs)
- Cities or Counties
- Non-Profit Organizations/Community Based Organizations
- Native American Tribal Governments
- Transit Operators
- Universities
- California Department of Transportation District Offices

Notes:

- CBTP grant funding per fiscal year will vary depending on funding availability.
- For State Fiscal Year 2000/01 (1<sup>st</sup> cycle of grants), 10 demonstration projects were awarded a total of approximately \$1.5 million.
- No applicant may receive more than \$300,000 in a single fiscal year.
- Applicants must provide a local contribution (cash or in-kind) of at least 20% of the total project cost.
- For application materials, contact local California Department of Transportation District Office Planning staff.



## **Downtown Rebound Planning Grants Program<sup>i</sup>**

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: Downtown Rebound Planning Grants Program grants fund local planning for infill housing, adaptive reuse (conversion) of commercial and industrial space into residential units, and the development of other forms of high density downtown housing.

Eligible Activities:

- Infill site inventories
- Infill development feasibility studies
- Strategic action plans to remove barriers and promote infill housing, mixed-use developments and transit corridor development
- Updates of general plans and zoning ordinances

Eligible Applicants:

- Cities
- Counties

Notes:

- As of February 1, 2001, the program had \$2.375 million in available funds.<sup>91</sup>
- The grants are provided to encourage adaptive reuse, higher density residential development, mixed-use development, and residential development within walking distance of transit nodes, employment centers and other urban amenities.
- Grants may also be used for seismic and structural feasibility studies on candidate buildings for adaptive reuse.

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<sup>i</sup> Unless otherwise noted, the Downtown Rebound Planning Grants Program information presented on this page was taken from the “Loan and Grant Program Directory”, California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## Downtown Rebound Program<sup>i</sup>

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: Downtown Rebound Program loans finance the revitalization of urban downtown areas through the adaptive reuse (conversion) of commercial and industrial space into residential units, residential infill, high-density housing development, and planning.

Eligible Activities:

- Adaptive reuse of vacant or underused commercial and industrial space into housing where at least 20% to 40% of the units are affordable
- Residential infill developments
- Development of high-density housing near mass transit stations

Eligible Applicants:

- Local public entities
- For-profit and nonprofit corporations
- Limited equity housing cooperatives
- Indian reservations and rancherias
- Limited partnerships

Notes:

- As of February 1, 2001, the program had \$20.85 million of available funds.<sup>92</sup>
- The maximum loan amount is \$20,000/unit plus an additional \$20,000/affordable unit.
- Loans at 5% simple interest for 20-year term for adaptive reuse projects, in which units are occupied by households with incomes not exceeding 150% of the local area median income.
- Loans at 3% (other terms as above) for units in adaptive reuse projects occupied by and affordable to households with incomes not over 50% or 60% of the local area median.

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<sup>i</sup> Unless otherwise noted, the Downtown Rebound Program information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## Home Investment Partnerships Program (HOME) <sup>i</sup>

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: HOME grants and loans assist cities, counties and nonprofit community housing development organizations (CHDOs) to create and retain affordable housing.

Eligible Activities:

- Housing rehabilitation for single-family and multifamily projects
- New construction of housing for single-family and multifamily projects
- Acquisition and rehabilitation for single-family and multifamily projects
- Predevelopment loans by CHDOs

Eligible Applicants:

- Cities and counties that do not receive HOME funds directly from HUD
- Current state certified CHDOs

Notes:

- As of February 1, 2001, the program had \$54 million of available funds.<sup>93</sup>
- Maximum grant amounts: \$1 million for rental construction projects and acquisitions programs; \$750,000 for homeownership construction projects; \$500,000 for homeownership purchase programs.
- A 25% match is required.
- Repayment of CHDO loans is usually deferred; term is 30 years or more, and interest rate is 3% simple per annum. A minimum of 15% of the total state allocation funds are set-aside for CHDOs.
- Most assistance is in the form of loans by the city or county recipients to project developers, to be repaid to local HOME accounts for reuse.

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<sup>i</sup> Unless otherwise noted, the Home Investment Partnerships Program (HOME) information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## Interregional Transportation Improvement Program (ITIP)<sup>i</sup>

Administering Agency: California Department of Transportation

Summary: The Interregional Transportation Improvement Program (ITIP) promotes projects that facilitate the interregional movement of people and goods.

Eligible Activities include:<sup>94</sup>

- Intercity rail
- Interregional road or rail expansion projects outside urban areas or projects of statewide significance

Eligible Applicants:

- Cities
- Counties
- Transit operators

Notes:

- Projects must be consistent with the Regional Improvement Program.
- Of the State Transportation Improvement Program, 25% comes to the ITIP.
- The ITIP has two main components:
  1. At least 15% of the funds must go for intercity rail improvements and highway projects outside urbanized areas.
  2. The remaining 10% in the ITIP is for intercity rail and interregional road projects anywhere in the state, including urbanized areas.
- ITIP funds are discretionary and available amounts vary annually.
- The Sacramento Area Council of Governments region received approximately \$37 million annually.

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<sup>i</sup> Unless otherwise noted, the Interregional Transportation Improvement Program (ITIP) information presented on this page was taken from the "Transportation Funding Handbook", Sacramento Area Council of Governments, July 1999.

## **Multifamily Housing Program (MHP)<sup>i</sup>**

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: Assist the new construction, rehabilitation and preservation of permanent and transitional rental housing for lower income households.

Eligible Activities include:

- New construction of permanent or transitional rental housing
- Rehabilitation of permanent or transitional rental housing
- Acquisition and rehabilitation of permanent or transitional rental housing

Eligible Applicants:

- Local public entities
- Nonprofit and for-profit corporations
- Limit equity housing cooperatives
- Individuals
- Indian reservations and rancherias
- Limited partnerships

Notes:

- As of February 1, 2001, the program had \$50 million of available funds.<sup>95</sup>
- The program administers deferred payment loans.
- Eligible costs include:
  1. Costs of developing the housing units
  2. Child care, after-school care and social service facilities integrally linked to the assisted housing units
  3. Capitalized reserves for the housing

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<sup>i</sup> Unless otherwise noted, the Multifamily Housing Program (MHP) information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.



## **Petroleum Violation Escrow Account (PVEA)<sup>i</sup>**

Administering Agency: California State Legislature

Summary: Court ordered refunds to the State for price overcharges on crude oil and refined petroleum products during a period of price control regulations.

Eligible Activities include:<sup>96</sup>

- Projects that conserve energy (public transit, ridesharing)
- Projects that provide restitution to the public

Eligible Applicants:

- Cities
- Counties
- California Department of Transportation
- Transit operators

Notes:

- PVEA funds must supplement, not supplant, those funds already available for the proposed project.
- PVEA funds are discretionary and available amounts vary annually.

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<sup>i</sup> Unless otherwise noted, the Petroleum Violation Escrow Account (PVEA) information presented on this page was taken from the “Transportation Funding Handbook”, Sacramento Area Council of Governments, July 1999.

## **Regional Transportation Improvement Program (RTIP) <sup>i</sup>**

Administering Agency: Regional Transportation Agencies and Metropolitan Transportation Commissions, and the California Transportation Commission

Summary: The Regional Transportation Improvement Program funds regional transportation capital improvement projects.

Eligible Activities include:<sup>97</sup>

- Rail extensions
- Upgraded transit stations and vehicles
- Parking structures at major transit stations
- Construction of carpool lanes
- Road rehabilitation
- Other uses

Eligible Applicants:

- Cities
- Counties
- Transit operators

Notes:

- Of the entire State Transportation Improvement Program, 75% of the funds go to the regional transportation improvement program.

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<sup>i</sup> Unless otherwise noted, the Regional Improvement Program information presented on this page was taken from the "Transportation Funding Handbook", Sacramento Area Council of Governments, July 1999

## Revolving Loan Fund<sup>i</sup>

Administering Organization: Low-Income Housing Fund (LIHF)

Summary: Provides financing for low-income housing and non-residential facilities at affordable rates and terms.

Eligible Activities include:

- Acquisition
- Community facilities
- Group homes/congregate care
- Human service facilities
- New for-sale and rental housing
- Preservation of affordable housing
- Rehab of apartments and owner-occupied housing
- Self-help housing

Eligible Applicants:

- Cooperative corporations
- Counties and rural communities
- Native American tribes/reservations
- Non-profit corporations
- Public housing agencies

Notes:

- Maximum loan amount is \$5 million, with the average amount being \$202,000.
- The program has \$40 million in available funding.
- LIHF's goal is to increase access to capital for low-income communities, primarily by providing financing for low-income housing and non-residential facilities.

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<sup>i</sup> Unless otherwise noted, the Revolving Loan Fund information presented on this page was taken from the Clearinghouse for Affordable Housing and Community Development Finance, California Department of Housing and Community Development, web page, [www.hcd.ca.gov/clearinghouse/](http://www.hcd.ca.gov/clearinghouse/).

## State Community Development Block Grant Program (CDBG)<sup>i</sup>

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: HCD provides the federal Community Development Block Grant (CDBG) program benefits to non-entitlement cities and counties.

Eligible Activities include:

- Housing rehabilitation
- Infrastructure
- Community facilities
- Economic development
- Planning studies

Eligible Applicants:

- Non-entitlement cities and counties

Notes:

- The four major components of the State CDBG program are:
  1. CDBG Economic Development Allocation: 'Over-the-Counter Component';
  2. CDBG Economic Development Enterprise Fund;
  3. CDBG General, Native American and *Colonia* Allocations; and
  4. Planning/Technical Assistance Grants.
- As of February 1, 2001, there was a combined total of \$43.9 million available in the various CDBG components.<sup>98</sup>
- At least 51% of the State CDBG funds must be used for housing.
- At least 51% of the households benefiting from each grant must be lower-income.

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<sup>i</sup> Unless otherwise noted, the State Community Development Block Grant Program information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.

## State Transit Assistance <sup>i</sup>

Administering Agency: Regional Transit Agencies and Transit Operators

Summary: Under the Public Transportation Account (PTA), this fund assists cities and counties pay for mass transit.

Eligible Activities include: <sup>99</sup>

- Transit and paratransit operating assistance
- Capital projects
- Regional transit coordination

Eligible Applicants:

- Public transit operators

Notes:

- The population portion of the PTA makes up 25% of the available funds and is distributed based on the relative share of the statewide population.
- The revenue portion of the PTA is based on the local transit agency's fare collections and accounts for an additional 25% of the PTA.
- Proposition 42 (an initiative that was approved by California voters in March 2002) amended the state Constitution so that all gasoline sales tax revenues will be now used for transportation purposes, even after the expiration of the Governor's Transportation Congestion Relief Program (TCRP) in 2008. Proposition 42 specifies that 20% of these sales tax revenues will be spent on mass transportation and related projects. <sup>100</sup>

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<sup>i</sup> Unless otherwise noted, the State Transit Assistance information presented on this page was taken from the "Transportation Funding Handbook", Sacramento Area Council of Governments, July 1999.

## State Transportation Improvement Program (STIP)<sup>i</sup>

Administering Agency: California Department of Transportation

Summary: The State Transportation Improvement Program (STIP) is a multi-year capital improvement program resource management document to assist the state and local entities to plan and implement transportation improvements and to utilize resources in a cost effective manner.

Eligible Activities include:

- Improving local roads
- Improving public transit (including buses)
- Intercity rail
- Pedestrian, bicycle, and intermodal facilities
- Environmental enhancement and mitigation

Eligible Applicants:

- Regional transportation planning agencies (RTPAs) and Metropolitan Planning Organizations (MPOs)
- Cities and counties
- Transit operators
- California Department of Transportation

Notes:

- State law allocates 25% of STIP funding to Interregional Transportation Improvement Program (ITIP) projects nominated by California Department of Transportation, and 75% to Regional Transportation Improvement Program (RTIP) projects, which are determined by regional agencies.
- The current STIP (1998-99 through 2003-04) has total funding of \$7.3 billion, of which the RTIP comprises \$5.3 billion and the ITIP is \$2 billion.
- Projects are presented as part of a complete ITIP or RTIP to the California Transportation Commission for approval and inclusion in the STIP.

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<sup>i</sup> Unless otherwise noted, the State Transportation Improvement Program information presented on this page was taken from the “Transportation Funding Opportunities – State and Federal Funds Available for Local Agency Projects”, State of California, Department of Transportation, Local Assistance Program, Office of Procedures Development, January 2001.

## Urban Predevelopment Loan / Jobs Housing Balance Program <sup>i</sup>

Administering Agency: California Department of Housing and Community Development (HCD)

Summary: The Urban Predevelopment Loan / Jobs-Housing Balance Program finances the initial costs of constructing, converting, preserving or rehabilitating assisted housing development near transit stations.

Eligible Activities include:

- Land purchases and options to buy land
- Options or deposits to buy or preserve existing publicly assisted rental housing to preserve the affordability of the units
- Professional services
- Site preparation
- Permit or application fees
- Related water or sewer development

Eligible Applicants:

- Local government agencies
- Nonprofit corporations
- Cooperative housing corporations

Notes:

- As of February 1, 2001, the program had \$4.85 million of available funds.<sup>101</sup>
- Interest rates are set between 3% and 7% based on project need.
- The eligible activities listed above must be for affordable housing projects within one-half mile of an existing or planned transit station.

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<sup>i</sup> Unless otherwise noted, the Urban Predevelopment Loan / Jobs-Housing Balance Program information presented on this page was taken from the "Loan and Grant Program Directory", California Department of Housing and Community Development, Division of Community Affairs, August 2000.



## Local/Regional Programs in California (Examples)

### City of Oakland Housing Development Program<sup>i</sup>

Administering Agency: City of Oakland, Community and Economic Development Agency

Summary: To preserve and expand the supply of affordable housing for low and moderate-income households.

Eligible Activities include:

- New construction and substantial rehabilitation of existing property
- Generally restricted to properties of 10 or more units

Eligible Applicants:

- Nonprofit and for-profit developers that meet the City's minimum standards for developer experience and qualifications

Notes:

- Maximum funding available is up to 40% of the total development costs.
- Loan terms are 30-35 years, 3% interest, and payments due if cash flow permits.
- Funds are allocated through periodic competitive funding rounds.
- Rents and tenant incomes (for rental properties), or sales prices and buyer incomes (for ownership properties) will be restricted through regulatory agreements.
- Priority given to projects in the seven Targeted Revitalization Neighborhoods in Oakland.

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<sup>i</sup> Unless otherwise noted, the Predevelopment Loan Program information presented on this page was taken from the "Directory of Housing Programs", City of Oakland, Community and Economic Development Agency, June 2000.

## Housing Incentive Program (HIP)<sup>i</sup>

Administering Agency: Metropolitan Transportation Commission (MTC) in the San Francisco Bay Area

Summary: The Housing Incentive Program (HIP) was created to fund and support the planning and development of livable communities throughout the San Francisco Bay Area. The program's goal is to work with local areas to develop and plan community-oriented transportation projects such as streetscapes and pedestrian/transit-oriented developments.

Eligible Activities: Eligible projects must be within a 1/3-mile walk from the center of the development site to a trunk line transit station and may include:

- Mixed-use transit villages
- Streetscapes and pedestrian plazas
- Bicycle facilities

Eligible Applicants:

- Cities and counties in the Bay Area

Notes:

- A portion of the MTC's TEA-21 funds are set aside to fund the HIP.<sup>102</sup>
- The density thresholds and award amounts are:
  - 25 units per acre: \$1,000 per bedroom
  - 40 units per acre: \$1,500 per bedroom
  - 60 units per acre: \$2,000 per bedroom
- For all affordable units, an additional \$500 per bedroom will be awarded.
- HIP seeks to maximize public investments in the transit infrastructure, encourage transit use, and address regional housing needs.
- Mixed-use development is encouraged but not required.

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<sup>i</sup> Unless otherwise noted, the Housing Incentive Program information presented on this page was taken from a "Transportation for Livable Communities, Housing Incentive Program (HIP)" summary sheet, Metropolitan Transportation Commission, Oakland, California.

## City of Oakland Predevelopment Loan Program <sup>i</sup>

Administering Agency: City of Oakland, Community and Economic Development Agency

Summary: To provide loans and grants to nonprofit housing developers to cover pre-development costs (feasibility analyses and preparation of loan applications) and to cover costs of preparing projects for syndication.

Eligible Activities include:

- Projects in the City of Oakland that have at least 20% of units earmarked for lower income persons

Eligible Applicants:

- Nonprofit organizations with stable administrative structure and previous housing development experience

Notes:

- Maximum amount available is \$35,000 per project, but actual amount is limited to amount needed to prepare applications for projects financing.
- Loan terms are 18 months at 6% interest rate; repayment of interest and principal will be deferred until receipt of project financing or the end of the 18-month period.
- Applicants must secure funding from other non-City sources for an amount equal to one-half the requested loan amount.
- Priority will be given to projects with substantial community support, and which have a high probability of obtaining funding.

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<sup>i</sup> Unless otherwise noted, the Predevelopment Loan Program information presented on this page was taken from the “Directory of Housing Programs”, City of Oakland, Community and Economic Development Agency, June 2000.

## Transportation for Livable Communities - Capital Grant Program <sup>i</sup>

Administering Agency: Metropolitan Transportation Commission (MTC) in the San Francisco Bay Area

Summary: MTC's Transportation for Livable Communities (TLC) program provides capital funds for transportation projects that can help to revitalize local communities and town centers in the San Francisco Bay Area. These projects must be part of an area's larger community development or redevelopment efforts and developed through an extensive local planning process.

Eligible Activities include:

- Streetscapes
- Transit villages
- Bicycle facilities and pedestrian plazas

Eligible Applicants:

- Local governments in the Bay Area
- Community-based nonprofit organizations in the Bay Area
- Transportation service providers in the Bay Area

Notes:

- Grants range from \$150,000 to \$2 million.
- Nonprofit organizations are encouraged to partner with public agencies.
- Evaluation criteria will be used to determine projects to fund. These criteria include:
  1. The project must remedy a current or anticipated problem and result in significant community benefits such as walkability or public transit access.
  2. Housing opportunities must be provided at densities to encourage transit, bicycling and pedestrian trips.

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<sup>i</sup> Unless otherwise noted, the Housing Incentive Program information presented on this page was taken from a "Transportation for Livable Communities, Capital Grants" summary sheet, Metropolitan Transportation Commission, Oakland, California.

## Transportation for Livable Communities - Planning Grant Program <sup>i</sup>

Administering Agency: Metropolitan Transportation Commission (MTC) in the San Francisco Bay Area.

Summary: MTC's Transportation for Livable Communities (TCL) program provides planning funds for small-scale transportation projects that can help to revitalize local communities and town centers in the San Francisco Bay Area. These projects must be part of an area's larger community development or redevelopment efforts.

Eligible Activities include:

- Community outreach and visioning
- Concept plans and drawings
- Construction cost estimates
- Implementation plans

Eligible Applicants:

- Local governments in the San Francisco Bay Area
- Community-based nonprofit organizations in the Bay Area
- Transportation service providers in the Bay Area

Notes:

- Up to \$50,000 is available per project.
- Eligible projects must meet ten initial evaluation criteria. Two of the criteria are:
  1. A collaborative planning process with community stakeholders, the project sponsor(s), the local jurisdiction and the local transit operator(s) will be undertaken.
  2. The overall project will have identifiable and likely synergistic effects such as increased housing opportunities in the project area at densities to encourage transit, bicycling, and pedestrian trips.

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<sup>i</sup> Unless otherwise noted, the Housing Incentive Program information presented on this page was taken from a "Transportation for Livable Communities, Planning Grants" summary sheet, Metropolitan Transportation Commission, Oakland, California.

## Private Programs

### Affordable Housing Clearinghouse<sup>i</sup>

Administering Organization: Affordable Housing Clearinghouse

Summary: Provides lines of credit, community development loans, and commercial loans. The Clearinghouse is a consortium of lenders that pool their funds.

Eligible Activities include:

- Acquisition
- Group homes/congregate care
- Homeless shelters
- Infrastructure development
- Mobile home park purchase assistance
- New rental and for-sale housing
- Preservation of affordable housing
- Rehab of apartments and owner-occupied housing
- Self-help housing
- Single Room Occupancy (SRO) hotels
- Transitional housing

Eligible Applicants:

- Cooperative corporations
- For-profit organizations
- Nonprofit corporations
- Public housing agencies

Notes:

- Orange County, California is a priority area for funding.
- The average amount of funds provided is \$800,000.

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<sup>i</sup> Unless otherwise noted, the Affordable Housing Clearinghouse information presented on this page was taken from the Clearinghouse for Affordable Housing and Community Development Finance, California Department of Housing and Community Development, web page, [www.hcd.ca.gov/clearinghouse/](http://www.hcd.ca.gov/clearinghouse/).

## Affordable Housing Program<sup>i</sup>

Administering Organization: Federal Home Loan Bank of San Francisco

Summary: Provides grants or subsidized interest rate loans for purchase, construction and/or rehabilitation of owner-occupied housing by or for very low-, low- and moderate-income households and/or to finance the purchase, construction or rehabilitation of rental housing.

Eligible Activities include:

- Acquisition
- Group homes/congregate care
- Homeless shelters
- Mobile home park purchase assistance
- New for-sale and rental housing
- Rehab of apartments and owner-occupied housing
- Self-help housing
- Single Room Occupancy (SRO) hotels
- Transitional housing

Eligible Applicants:

- Counties
- For-profit organizations and nonprofit corporations
- Native American tribes/reservations
- Public housing agencies

Notes:

- The program has \$18 million in available funding.
- The amount of grant or interest rate subsidy depends on the amount of assistance required to make the project feasible.

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<sup>i</sup> Unless otherwise noted, the Affordable Housing Program information presented on this page was taken from the Clearinghouse for Affordable Housing and Community Development Finance, California Department of Housing and Community Development, web page, [www.hcd.ca.gov/clearinghouse/](http://www.hcd.ca.gov/clearinghouse/).



## Multifamily Affordable Financing Program<sup>i</sup>

Administering Organization: Bank of America Community Development Bank

Summary: Originates construction/rehab/acquisition/bridge loans to finance qualified multifamily projects and subdivisions that serve individuals earning 80% or less of area median income.

Eligible Activities include:

- Acquisition
- Community facilities
- Infrastructure development
- New rental housing
- Rehab of apartments
- Single Room Occupancy (SRO) hotels

Eligible Applicants:

- For-profit organizations
- Nonprofit corporations
- Public housing agencies

Notes:

- The program has \$200 million in available funding.
- Loan terms are 18 months for construction and up to 30 years for permanent loans.
- Public sector financial support required.
- In addition to acquisition loans, construction/rehab loans, and long-term loans, the type of assistance available includes bridge loans for tax-credit projects, loans for tax-exempt bond financed projects and credit enhancement through the Federal National Mortgage Association [Fannie Mae] (FNMA).

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<sup>i</sup> Unless otherwise noted, the Multifamily Affordable Financing Program information presented on this page was taken from the Clearinghouse for Affordable Housing and Community Development Finance, California Department of Housing and Community Development, web page, [www.hcd.ca.gov/clearinghouse/](http://www.hcd.ca.gov/clearinghouse/).

## Appendix A: Glossary of Terms Used in the Statewide TOD Study Final Report and Appendix

**Author of this section: Daniel Mayer, Student Assistant,  
California Department of Transportation, Mass Transportation Division**

The following list of terms and definitions was developed specifically for this study. Many of these definitions have been narrowly defined for use in this report. They are for informational purposes and should not be considered as officially endorsed definitions.

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**5309:** See “*Federal Transit Act Section 5309 Grant Program*”

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- A -

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**AAA:** See “*Automobile Association of America*”

**ABAG:** See “*Association of Bay Area Governments*”

**ACF:** See “*American Communities Fund*”

**AC Transit:** Transit provider for the East Bay area of San Francisco Bay. <sup>i</sup>

**Affordable Housing Clearinghouse:** Please see Appendix for Chapter 7

(Related Term: “Private Funding Source”)

**Affordable Housing Program:** Please see Appendix for Chapter 7

(Related Term: “Private Funding Source”)

**affordable housing:** Housing that costs the occupants less than 30% of total household income. <sup>103</sup> (Related Terms: “household”, “CDBG”)

**air rights:** Development rights to the space above a property. Property owners may choose to build in, lease or sell their ‘air rights’.

**alternate modes of travel:** Travel that does not require the use of a personally operated automobile for the entire trip (e.g. walking, use of a bicycle, transit, park-and-ride). (Related Terms: “transit”, and “park-and-ride”)

**American Communities Fund (ACF):** Private funding source (via Fannie Mae) that offers debt financing, equity, and historic tax credit investments. <sup>ii</sup> (Related Term: “Federal Funding Sources”)

**Amtrak:** Regional and national intercity rail and bus transit provider. <sup>iii</sup> (Related Terms: “transit”, “Capitol Corridor”)

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<sup>i</sup> AC Transit Webpage <http://www.actransit.org/>

<sup>ii</sup> American Communities Fund (ACF), Fannie Mae:  
[http://www.efanniemae.com/hcd/comm\\_invest/acf/acf\\_products.html](http://www.efanniemae.com/hcd/comm_invest/acf/acf_products.html)

<sup>iii</sup> Amtrak – Catch the Next Wave in Train Travel: <http://www.amtrak.com>

**analysis tools:** Refers to modeling tools (e.g. transportation models) and new types of technical tools designed to accomplish some type of planning objective. Many of these utilize GIS technology to produce maps and data that describe and quantify the impacts of various proposed land uses and development proposals (examples include INDEX and PLACES<sup>3</sup>). (Related Terms: “Geographic Information System,” “INDEX” and “PLACES<sup>3</sup>”)

**AOD:** See “*automobile-oriented development*”

**ARB:** See “*California Air Resources Board*”

**Article XIX or Article 19:** See “*California State Constitution Article XIX*”

**Association of Bay Area Governments (ABAG):** A regional association of city and county governments in the San Francisco Bay Area of California. ABAG is involved with various region-wide land use planning and technical responsibilities (including the coordination of TOD placement and planning in the region).

**Automobile Association of America (AAA):** National car insurance provider that also (among other things) conducts research on car ownership and use.<sup>ii</sup>

**Automobile:** For the purposes of this report, the term refers to privately operated vehicles that are used for personal travel, daily commuting, and for running errands. These include, but are not limited to sport utility vehicles (SUVs), light-duty trucks, and any combination thereof, along with all the various van and car sizes. (Related Terms: “personally-operated vehicle”, “single occupant vehicle”)

**automobile-oriented development (AOD):** Typically low-density, dispersed development that lacks good transit. AOD oftentimes has curvilinear and non-interconnected residential street patterns that feed a hierarchy of increasingly large streets. It is characterized by its segregation of land uses into “big box” retail, tract housing, and strip malls. When transit is available, it is usually at a significant walking distance from most areas, with only infrequent service. (Related Terms “dispersed development pattern,” “sprawl,” “big box retail,” “tract housing,” and “strip mall”)

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**baby boom generation:** The group of people born during a large surge in the number of births after 1945 and before the end of 1955. These individuals are beginning to reach retirement age. As they age, they will increasingly require alternate modes of travel that do not require a personally operated vehicle.

**BART:** See “*Bay Area Rapid Transit*”

**Bay Area Rapid Transit (BART):** Transit agency that operates heavy rail service in the San Francisco Bay Area.<sup>iii</sup> (Related Terms: “transit”, “heavy rail”, “Capitol Corridor”)

**BEDI:** See “*Brownfield Economic Development Initiative*”

**below grade:** Pertaining to a structure, part of a structure, or piece of equipment that is below the surrounding area’s “ground level.” An example would be a parking structure built below a building and the adjacent street. (Related Term: “structured parking”)

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<sup>i</sup> Association of Bay Area Governments (ABAG) website: <http://www.abag.org/>

<sup>ii</sup> California AAA website: <http://www.csaa.com/home/>

<sup>iii</sup> Bay Area Rapid Transit website: <http://www.bart.gov/>

**Bicycle Transportation Account (BTA):** State funding source that provides money for “city and county projects that improve safety and convenience for bicycle commuters.”<sup>i</sup>  
(Related Terms: “California State Funding Sources”)

**big box retail:** High volume auto-oriented retail usually surrounded by a large amount of surface parking and built on the fringe of developed land. Examples include: suburban malls, discount warehouse retail, home improvement outlets, and hobby outlets. This type of development has been popular with local governments who seek additional tax dollars.  
(Related Terms: “fiscalization of land use,” “strip mall,” and “automobile-oriented development”)

**BIP:** See “*Business Improvement Plan*”

**Bond Tranche:** A series of bonds arranged in different ‘classes’ that pay for certain separate parts of a development and have varying payment schedules.

**Brownfield Economic Development Initiative (BEDI):** Federal funding source that “provides funds and loan guarantees to clean up and redevelop environmentally contaminated industrial and commercial sites, commonly known as brownfields.”<sup>ii</sup> (Related Terms: “brownfield”, “Federal funding sources”)

**brownfield:** A term used by planners, developers, and the U.S. EPA to describe a piece of property that has been previously used for light industrial or heavy commercial purposes. Its major characteristic is that it is either polluted or perceived as being so, and therefore requires at least some cleanup before it is used again (this is different than the legal term ‘Superfund Project’ – which is a federal designation for especially toxic properties). TOD built on brownfields can take advantage of Brownfield Economic Development Initiative (BEDI) funding. (Related Term: “Brownfield Economic Development Initiative”, “greenfield”)

**BRT:** See “*Bus Rapid Transit*”

**BTA:** See “*Bicycle Transportation Account*”

**Bus Rapid Transit (BRT):** Federal Transit Administration’s definition: “Think Rail, Use Buses. That’s the quickest way to describe Bus Rapid Transit. BRT combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, HOV lanes, expressways, or ordinary streets. A BRT system combines *intelligent transportation systems* technology, priority for transit, cleaner and quieter vehicles, rapid and convenient fare collection, and integration with land use policy.”<sup>iii</sup> (Related Term: “High Occupancy Vehicle”)

**Business Improvement Plan (BIP):** BIP’s are used to identify, analyze, and implement best business practices for a particular area. For example, a BIP might address urban design, parking, traffic, and marketing programs necessary for the improvement of a CBD. (Related Term: “Central Business District”)

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**CalHome Program:** State funding source whose purpose is to “Enable low and very-low-income households to become or remain homeowners.”<sup>iv</sup> (Related Terms: “California State Funding Sources”)

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<sup>i</sup> California Department of Transportation, Local Programs Procedures: Bicycle Transportation Account  
<http://www.dot.ca.gov/hq/LocalPrograms/lpp/lpp01-03.pdf>

<sup>ii</sup> Housing and Urban Development, Brownfields Economic Development Initiative  
<http://www.hud.gov/progdsc/brownf.cfm>

<sup>iii</sup> Federal Transit Administration: Bus Rapid Transit  
<http://www.fta.dot.gov/brt/>

<sup>iv</sup> California Department of Housing and Community Development: CalHome Program

**California Air Resources Board (ARB):** Mission: “The California Air Resources Board (ARB) mission is to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state.”<sup>i</sup>

**California Energy Commission (CEC):** California’s primary energy policy and planning agency. The CEC is charged with: forecasting future energy needs and keeping historical energy data; licensing thermal power plants 50 MW or larger; promoting energy efficiency through appliance and building standards; developing energy technologies and supporting renewable energy; and planning for and directing state response to energy emergencies.<sup>ii</sup>

**California Environmental Quality Act (CEQA):** California law that requires state and local agencies to consider environmental impacts of proposed projects. If a proposed project has a potential to result in significant environmental harm, an Environmental Impact Report (EIR) must be prepared and certified before any action is taken on the project.<sup>iii</sup> (Related Terms: “Environmental Impact Report”)

**California Organized Investment Network (COIN):** COIN mission is to increase “insurance industry investment in underserved and rural communities throughout California.”<sup>iv</sup> (Related Terms: “California State Funding Sources”)

**California State Constitution Article XIX:** Restricts the use of state gasoline tax revenues for certain purposes. These monies (currently) may only be used to plan, construct, maintain, and operate public streets and highways; and to plan, construct, and maintain mass transit tracks and related fixed facilities (such as stations). The gasoline tax revenues *cannot* be used to operate or maintain mass transit systems or to purchase or maintain rolling stock (trains, buses, or ferries).<sup>v</sup>

**California State Funding Sources:** See table 7.2 in Chapter 7 & Appendix for Chapter 7.

**Caltrain:** A Commuter rail service serving the San Francisco Peninsula that links San Francisco to San Jose and Gilroy.<sup>vi</sup> (Related Term: “commuter rail”)

**Caltrans:** The semi-official, yet commonly used name for the California Department of Transportation.<sup>vii</sup>

**Capitol Corridor:** Regional intercity rail and bus transit provider serving Auburn, Sacramento, San Francisco (via bus), Oakland and San Jose (plus cities in between). BART manages it, and the rail cars are owned by the California Department of Transportation.<sup>viii</sup> (Related Terms: “Amtrak”, “transit”, “Bay Area Rapid Transit”, “Caltrans”)

**car:** See “*automobile*”

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<sup>i</sup> <http://www.hcd.ca.gov/ca/calhome/>

<sup>ii</sup> California Air Resources Board Website: <http://www.arb.ca.gov/>

<sup>iii</sup> California Energy Commission Website: <http://www.energy.ca.gov/>

<sup>iv</sup> California Environmental Resources Evaluation System (CERES), CA website:

CEQA The California Environmental Quality Act: <http://ceres.ca.gov/ceqa/>

<sup>v</sup> California Department of Insurance: California Organized Investment Network (COIN)  
<http://www.insurance.ca.gov/COIN/COindex.htm>

<sup>vi</sup> Official California Legislative Information: State Constitution  
<http://www.leginfo.ca.gov/const-toc.html> (scroll down to “Article XIX”)

<sup>vii</sup> Caltrain Welcome Page: <http://www.caltrain.org/caltrain/index.html>

<sup>viii</sup> California Department of Transportation: <http://www.dot.ca.gov>

Amtrak – The Capitol Corridor: <http://www.amtrakcapitols.com/>

**Carbon Dioxide (CO<sub>2</sub>):** Greenhouse gas produced by the exhalations of animals and the combustion of fossil fuels. (Related Terms: “Greenhouse Effect” and “Methane”)

**Carbon Monoxide (CO):** Air pollutant that can cause fatigue, irritability, unconsciousness, and death by depriving a person of oxygen (depending on the concentrations inhaled). CO is a by-product of internal combustion and found in car exhaust. It is a pollutant that has been determined to be hazardous to human health and regulated under EPA's National Ambient Air Quality Standards.<sup>104</sup> (Related Terms: “Health Effects of Smog,” “hydrocarbons,” “Nitrous Oxide,” and “Reactive Organic Gas”)

**carpool lanes:** See “*High Occupancy Vehicle lanes*”

**CBD:** See “*Central Business District*”

**CCFFP:** See “*Child Care Facilities Finance Program*”

**CDBG:** See “*Community Development Block Grant*”

**CEC:** See “*California Energy Commission*”

**Central Business District (CBD):** Heart of an urban area, which is characterized by moderate to intense use of land for office, retail, and commercial purposes. CBDs also commonly act as a central hub for public transit. (Related Term: “transit”)

**central city:** See “*Central Business District*”

**CEQA:** See “*California Environmental Quality Act*”

**Charrette:** Process of consensus building in which all the involved parties work together on the site in order to develop a conceptual plan or framework.

**Chicago Transit Authority (CTA):** Transit agency serving the greater Chicago area with bus and heavy rail service. (Related Terms: “transit”, “heavy rail”)

**CH<sub>4</sub>:** See “*Methane*”

**Child Care Facilities Finance Program (CCFFP):** State funding source that provides “loan guarantees and direct loans for the development and/or expansion of child care and development facilities, and family child care homes serving more than six children.” (Related Term: “California State Funding Sources”)

**circuit riders:** Technical experts who travel to various locations in order to provide technical assistance.

**Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN):** State funding source that “provides financial assistance to help cleanup and redevelopment” at brownfield sites. (Related Terms: “California State Funding Sources”, “brownfield”)

**Climate Change:** See “*Greenhouse effect*”

**CMAQ:** See “*Congestion Mitigation and Air Quality*”

**CO:** See “*Carbon Monoxide*”

**CO<sub>2</sub>:** See “*Carbon Dioxide*”

**COG:** Acronym for “Council of Governments” (Related Term: Metropolitan Planning Organization”)

**COIN:** See “*California Organized Investment Network*”

**Community Based Transportation Planning (CBTP) Grants:** Money that is used to “seed planning activities that encourage livable communities. CBTP grants assist local agencies to better integrate land use and transportation planning, to develop

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<sup>i</sup> Chicago Transit Authority (CTA): <http://www.transitchicago.com/>

<sup>ii</sup> California Department of Toxic Substances Control: Brownfields  
<http://www.dtsc.ca.gov/LawsRegulationsPolicies/Brownfields/>



alternatives for addressing growth and to assess efficient infrastructure investments that meet community needs.”<sup>i</sup> (Related Term: “California State Funding Sources”)

**Community Development Block Grant Program (State) (CDBG):** State funding used for the “development of viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for persons of low and moderate income.”<sup>ii</sup> (Related Terms: “California State Funding Sources”, “affordable housing”)

**Community Development Block Grant Program (Federal) (CDBG):** Federal grant program that “provides eligible metropolitan cities and urban counties (called “entitlement communities”) with annual direct grants. These grants can be used to revitalize neighborhoods, expand affordable housing and economic opportunities, and/or improve community facilities and services, principally to benefit low- and moderate-income persons.”<sup>iii</sup> (Related Terms: “Federal Funding Sources” and “affordable housing”)

**Community Redevelopment Agency of the City of Los Angeles (CRA/LA):** The entity that is charged with planning and implementing strategies that aim to halt and reverse the deterioration of Los Angeles’ most troubled urban areas.<sup>iv</sup> (Related Term: “redevelopment”)

**Community Reinvestment Act (CRA):** Originally enacted by the U.S. Congress in 1977, and revised in 1995, the CRA encourages “federally insured banks and thrifts to meet the credit needs of their entire community, including low- and moderate-income residents”.

**commuter rail:** Rail passenger service that operates between metropolitan and suburban areas that uses traditional railway lines crossed by automobile traffic. (Related Term: “light rail”, “heavy rail”, and “transit”)

**compact growth patterns:** Moderate to higher density development that is located in proximity to either a downtown or another centralized area.

**Conditional Use Permit (CUP):** Through the use of a public hearing process, a CUP allows a city or county to “consider special uses which may be essential or desirable to a particular community, but which are not allowed as a matter of right within a zoning district.”<sup>105</sup>

**Congestion Burden Index (CBI):** The CBI takes into account both an area's level of congestion and the degree to which travelers tend to avoid traffic congestion by not using an automobile. (Related Term: “Congestion Mitigation and Air Quality”)

**Congestion Mitigation and Air Quality (CMAQ):** CMAQ is a federal transportation funding program for projects and programs that improve air quality; specifically, programs that reduce ozone (O<sub>3</sub>), carbon monoxide (CO), and small particulate matter (PM-10) or that otherwise reduce transportation-related emissions.<sup>v</sup> (Related Terms: “Federal Funding Sources”, “health effects of smog”)

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<sup>i</sup> Community Based Transportation Planning (CBTP) Grants  
<http://www.dot.ca.gov/hq/tpp/offices/ocp/cbtpg.htm>

<sup>ii</sup> California Dept. of Housing & Community Development: Community Development Block Grant Program  
<http://www.hcd.ca.gov/ca/cdbg/progdesc.html>

<sup>iii</sup> Housing and Urban Development: Community Development Block Grant Program  
<http://www.hud.gov/progdesc/cdbgent.cfm>

<sup>iv</sup> Community Redevelopment Agency of the City of Los Angeles: <http://www.ci.la.ca.us/CRA/>

<sup>v</sup> US Department of Transportation: The Congestion Mitigation and Air Quality Improvement Program  
<http://www.fta.dot.gov/library/planning/enviro/cmaq.htm>



**construction defect liability:** Potential barrier to TOD. Developers are hesitant to construct attached for-sale housing due to the increased likelihood that unit owners will sue the developer for construction defects.

**conventional development pattern:** See “*dispersed development pattern*”

**corridor:** See “*transportation corridor*”

**CRA/LA:** See “*Community Redevelopment Agency of the City of Los Angeles*”

**CRA:** See “*Community Reinvestment Act*”

**CTA:** See “*Chicago Transit Authority*”

**CUP:** See “*Conditional Use Permit*”

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**Dallas Area Rapid Transit (DART):** Transit agency serving the Dallas Texas metropolitan area with bus, commuter and light rail service (in addition to High Occupancy Vehicle lanes).<sup>i</sup> (Related Terms: “transit”, “light rail”, “commuter rail”)

**DART:** See “*Dallas Area Rapid Transit*”

**Design Charrette:** See “*Charrette*”

**Density:** A common measure of people per mile, households per acre, jobs per block, or combinations of these and other factors.

**Denver Regional Transportation District (RTD):** Transit agency serving the Denver area with bus and light rail service.<sup>ii</sup> (Related Terms: “transit”, “light rail”)

**Development entitlement process** (e.g. **development approvals**): Process by which a local government reviews a proposal for a development application. The application is first checked for completeness and accuracy. A CEQA and/or other environmental review is then implemented. Subsequently, the governing body may decide to hold public hearings on the development or to approve it.

**dispersed development pattern:** Characterized by low-density scattered development, typically located on the fringe of already developed areas, and often without a link to transit. (Related Terms: “automobile-oriented development”, “big box retail”, “strip mall”)

**Downtown Rebound Planning Grant Program:** State funding source for “local planning for infill housing, conversion of commercial and industrial space into residential units, and the development of other forms of high density downtown housing.”<sup>iii</sup> (Related Terms: “California State Funding Sources,” “infill development”)

**Downtown Rebound Program:** State funding source for the revitalization of urban areas through infill and redevelopment.<sup>iv</sup> (Related Terms: “California State Funding Sources,” “infill development,” and “redevelopment”)

**DU:** See “*dwelling unit*”

**dwelling unit (DU):** An apartment, house, condominium, or other similar living structure. DU is defined differently than the term “household” in that “household” refers to an occupied dwelling unit. (Related Term: “household”)

**DVRC:** Acronym for “Delaware Valley Regional Planning Commission”<sup>i</sup>

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<sup>i</sup> Dallas Area Rapid Transit (DART) Website: <http://www.dart.org/>

<sup>ii</sup> Denver Regional Transportation District (RTD): <http://www.rtd-denver.com/>

<sup>iii</sup> California HCD: Downtown Rebound Planning and Predevelopment Grants Program  
<http://www.hcd.ca.gov/ca/drpgp/>

<sup>iv</sup> California Department of Housing and Community Development: Downtown Rebound Program  
<http://www.hcd.ca.gov/ca/drpf/>

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**Economic Development Initiative (EDI):** Federal program that “provides grants to local governments that can be used to enhance both the security of loans guaranteed through the Economic Development Loan Fund and the feasibility of the large economic development and revitalization projects they finance.”<sup>ii</sup> (Related Term: “Federal Funding Sources”)

**EDI:** See “*Economic Development Initiative*”

**EIR:** See “*Environmental Impact Report*”

**elasticity:** A term that refers to the fact that a percentage change in one variable can often be associated with a percentage change in another. Specifically, elasticity is a measure of this relationship.

**Emery Go-Round:** Free shuttle that connects Emeryville's employers and shopping centers with MacArthur BART station. Developers who have built large projects in Emeryville pay for this service.<sup>iii</sup> (Related Term: “Bay Area Rapid Transit”)

**eminent domain:** Legal ability of a public agency to require a property owner to sell property at “fair market value” if it is needed for a compelling public purpose.

**empty nester:** A man, woman, or couple who has adult children that no longer reside with the man, woman, or couple.

**environmental assessment:** See “*Environmental Impact Report*”

**Environmental Impact Report (EIR):** A document that needs to be drafted whenever a project has a potential to result in significant environmental harm within the state. EIRs must contain detailed information on the possible extent of impact a proposed project is likely to have on the environment. An EIR must also contain a mitigation plan that lists ways in which the negative environmental effects may be minimized. (Related Term: “California Environmental Quality Act”)

**EPA:** Acronym for “Environmental Protection Agency”<sup>iv, v</sup>

**excess land:** Land which is not currently being used by the controlling agency and is not projected to be used in the future. (Related Term: “excess right-of-way”)

**excess right-of-way:** Additional or excess property on the periphery of a transportation corridor (highway, road, rail line etc.) that is not currently being used for a transportation purpose and is not projected to be used for such a purpose. (Related Terms “corridor”, and “excess land”)

**exurban:** Region that is beyond a city/urban area and its suburbs.

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**f<sup>2</sup>:** See “square feet”

**Fannie Mae:** Company whose goal is to help more low, moderate and middle-income families buy homes by providing various financial products and services.<sup>i</sup> (Related Terms: “Affordable Housing”, “Housing and Urban Development”)

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<sup>i</sup> Delaware Valley Regional Planning Commission: <http://www.dvrpc.org/>

<sup>ii</sup> United States Department of Housing and Urban Development: Economic Development Initiative (EDI) <http://www.hud.gov/progdsc/edi.cfm>

<sup>iii</sup> San Francisco Bay Area Transit Information: EmeryGoRound <http://www.transitinfo.org/EmeryGoRound/>

<sup>iv</sup> United States Environmental Protection Agency (EPA): <http://www.epa.gov>

<sup>v</sup> California Environmental Protection Agency (CalEPA): <http://www.calepa.ca.gov/>

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**FAR:** See “*Floor-Area Ratio*”

**FDC:** Acronym for “Fruitvale Development Corporation”

**Federal Funding Sources:** See Table 7.1 in Chapter 7, and Appendix for Chapter 7.

**Federal Highway Administration (FHWA):** Federal agency under the US Department of Transportation that is charged with maintaining the US highway system and with creating intermodal transportation centers.<sup>ii</sup>

**Federal Transit Act Section 5309 Grant Program:** Federal grant money that can be used to purchase new buses/trains and improve/expand rail systems.<sup>iii</sup> (Related Term: “Federal Funding Sources”)

**Federal Transit Administration:** Federal agency whose aim is to “ensure personal mobility and America’s economic and community vitality by supporting high quality public transportation through leadership, technical assistance and financial resources.”<sup>106</sup> (Related Term: “Federal Highway Administration”)

**FHWA:** See “*Federal Highway Administration*”

**fiscalization of land use:** Currently, local governments have less control over their property tax revenue than they had in the past. The result is an increased dependence on sales tax revenues from retail development. Consequently, local governmental zoning often aims to generate the greatest amount of future tax dollars in the minimum amount of time by the concentration of retail development on cheap, easily obtained land. This development usually occurs on the fringe of already developed land, with preexistent access to either a highway or other high volume thoroughfare. (Related Term: “big box retail”)

**Floor-Area Ratio (FAR):** The ratio between the number of square feet on a lot to the number of allowable square feet that a building constructed on that lot can have. For example: If a 10,000 square foot lot has a FAR of 0.75, then a developer can only construct a building that has 7,500 square feet of total floor area. Furthermore, this applies to the total floor area of each story combined. Therefore, if the before-mentioned building has two stories, then no more than 3,750 square feet are allowable per story.<sup>107</sup> (Related Term: “square feet”)

**FTA:** See “*Federal Transit Administration*”

**Funding Sources:** See “*Federal Funding Sources*”, “*Local/Regional Funding Sources*”, “*Private Funding Sources*”, “*California State Funding Sources*”

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**GCRTA:** See “*Greater Cleveland Regional Transit Authority*”

**General Plan:** Summary of city or county policies that relate to its long-term development. Maps, text, images, charts, and tables can be used in its presentation. General Plans are legal documents that the State of California requires each local agency to complete and adopt. However, the “general plan may be adopted in any format deemed appropriate or convenient by the legislative body, including the combining of elements.”<sup>iv</sup> (Related Term: “specific plan”)

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<sup>i</sup> Fannie Mae: Helping Americans Achieve the Dream of Home Ownership: <http://www.fanniemae.com/>

<sup>ii</sup> US Department of Transportation, Federal Highway Administration: <http://www.fhwa.dot.gov/>

<sup>iii</sup> Federal Transit Administration (FTA) Section 5309 (Section 3(j)) FTA New Starts Criteria  
<http://www.fta.dot.gov/library/legal/mjinpoli.htm>

<sup>iv</sup> California Law Code Section 65301  
<http://www.leginfo.ca.gov/calaw.html> (Select “All” and input “65301”)

**gentrification:** Changes in a neighborhood or city that reflect the inflow of money and affluence from the outside. Often this inflow of money and resultant capital investment coincides with an increase in the amount of professional and managerial jobs within an area. This then leads to an increase in the numbers of "gentry" living in the neighborhood or city. The effect of this inflow of affluence is a rise in rental and property values that often quickly exceeds the ability of long-term residents to afford. (Related Term: "spatial mismatch problem")

**Geographic Information System (GIS):** USGS definition: "Geographic information systems (GIS) technology can be used for scientific investigations, resource management, and development planning. For example, a GIS might allow emergency planners to easily calculate emergency response times in the event of a natural disaster, or a GIS might be used to find wetlands that need protection from pollution." <sup>i</sup> (Related Terms: "PLACE<sup>3</sup>S", and "INDEX")

**GIS:** See "*Geographic Information System*"

**Global Warming:** See "*Greenhouse effect*"

**Greater Cleveland Regional Transit Authority (GCRTA):** Transit agency serving the Cleveland Ohio metropolitan with bus, heavy rail and Bus Rapid Transit service. <sup>ii</sup> (Related Terms: "transit", "heavy rail", "Bus Rapid Transit")

**greenbelt:** A pedestrian and bicycle oriented transportation corridor that usually is typified by open space and an abundance of vegetation. Greenbelts generally serve as buffers between developed areas. (Related Term: "transportation corridor")

**greenfield:** A term used by planners and developers to describe a piece of property that has never been developed and does not require any special cleanup before development. Examples include, but are not limited to; farmland, forest, and wetlands. (Related Term: "brownfield")

**Greenhouse effect:** A popular term used to describe the roles of water vapor, carbon dioxide, and other trace gases in keeping the Earth's surface warmer than it would be otherwise. These gases and vapors tend to trap heat in the atmosphere. There is concern that increasing concentrations of greenhouse gases, including carbon dioxide, methane, and other man-made substances, may enhance the greenhouse effect and cause global climate change. <sup>108</sup> (Related Terms: "Carbon Dioxide" and "Methane")

**gross area:** Total land area. (Related Term: "net area")

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**HC:** See "*hydrocarbons*"

**HCD:** See "*Housing and Community Development*"

**headway:** The distance between the front of one vehicle in a traffic stream to the rear of the vehicle behind it. However, transportation planners use this term to denote the frequency of transit service. For example, if a bus route has a service frequency of 30 minutes, then it has a headway of 30 minutes. Transportation operators (such as Amtrak or Sacramento Regional Transit) use this term to denote the difference in time or distance between two trains, ships, etc. traveling in the same direction over the same course.

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<sup>i</sup> United States Geologic Survey (USGS): Geographic Information Systems  
<http://www.usgs.gov/research/gis/title.html>

<sup>ii</sup> Greater Cleveland Regional Transit Authority: <http://www.gcrt.org/>

**health effects of smog:** Various respiratory, pulmonary and other effects that are caused by air-borne pollutants: Hydrocarbons, NOx, CO, and ROG. These pollutants have been determined to be hazardous to human health and are therefore regulated under EPA's National Ambient Air Quality Standards.<sup>109</sup> (Related Terms: "Carbon Monoxide," "hydrocarbons," "Nitrous Oxide," "Reactive Organic Gas", "NAAQA")

**heavy rail:** High speed, passenger rail cars that can operate alone or in trains on fixed rails that are separated from vehicle and foot traffic. Heavy rail has exclusive right-of-way and is powered by an electrified third rail. Also known as "rapid rail," "subway," "elevated rail," or "metro rail".<sup>110</sup> (Related Terms: "light rail", "commuter rail", "transit", and "right-of-way")

**High Occupancy Vehicle (HOV) lanes:** Also known as carpool lanes. HOV lanes are lanes of traffic that are set aside for buses, light rail, or for personally operated vehicles with more than a certain set number of passengers aboard. On freeways they are often demarcated with diamond shapes. (Related Term: "Personally Operated Vehicle")

**HIP:** See "*Housing Incentive Program*"

**HOME Investment Partnerships Program:** HOME "helps to expand the supply of decent, affordable housing for low- and very low-income families by providing grants to state and local governments ... which meet local needs and priorities."<sup>i</sup> (Related Term: Federal Funding Sources")

**HOPE VI:** Federal funding program (via HUD) that aims to revitalize the "Nation's most distressed public housing developments by providing grants and unprecedented flexibility to address the housing and social service needs of their residents."<sup>ii</sup> (Related Terms: "Federal Funding Sources" and "Housing and Urban Development")

**Household:** An occupied personal area of permanent residence such as an apartment, house, condominium or other similar living structure (2.7 persons per household is the US census-accepted average). (Related Term: "dwelling unit")

**Housing and Community Development (HCD):** A California state department whose mission is to "provide leadership, policies and programs to expand and preserve safe and affordable housing opportunities and promote strong communities for all Californians."<sup>iii</sup> (Related Term: "affordable housing")

**Housing unit:** See "*dwelling unit*"

**Housing and Urban Development (HUD):** Federal agency which is charged with the responsibility of assisting both developers and individuals to "ensure safe, decent and affordable housing; create opportunities for residents' self-sufficiency and economic independence; and assure fiscal integrity by all program participants."<sup>iv</sup> (Related Terms: "affordable housing", "Low Income Housing Tax Credit")

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<sup>i</sup> United States Housing and Urban Development: HOME Investment Partnerships Program  
<http://www.hud.gov/offices/cpd/affordablehousing/programs/home/index.cfm>

<sup>ii</sup> United States Housing and Urban Development: HOPE VI  
<http://www.hud.gov/progdesc/hopevia.cfm>

<sup>iii</sup> California Department of Housing and Community Development: <http://www.hcd.ca.gov/>

<sup>iv</sup> US Department of Housing and Urban Development: <http://www.hud.gov/index.html>



**Housing Development Program – City of Oakland:** Local funding source offered in the City of Oakland that provides capital for developers building affordable housing units.<sup>i</sup> (Related Term: “Local/Regional Funding Sources”)

**Housing Incentive Program (HIP):** Local funding source (via MTC) that offers incentives to local governments for locating and implementing certain types of housing. This report suggests the creation of a statewide HIP program for TOD.<sup>ii</sup> (Related Terms: “Local/Regional Funding Sources,” “Metropolitan Transportation Commission”)

**housing unit:** See “*dwelling unit*”

**HOV:** See “*High Occupancy Vehicle*”

**HUD:** See “*Housing and Urban Development*”

**hydrocarbon (HC):** A class of air pollutants that are derived from the incomplete combustion of fossil fuels. HC’s can be direct pollutants of water supplies or can be indirect causes of cancer and respiratory impairment in human beings. HC is a pollutant that has been determined to be hazardous to human health and regulated by the EPA.

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**INDEX:** A geographic information system-based tool that is used for indicator analysis and for presentation. It is an integrated analysis tool that is used for scenario analysis, decision support, data management, and public participation. It is used to “measure the attributes and performance of community plans.”<sup>iii</sup> (Related Terms: “Geographic Information Systems,” “PLACE<sup>3</sup>S,” and “public participation”)

**infill development:** New development in an already developed area (e.g. conversion of a downtown slum into a TOD). (Related Term: “redevelopment”)

**infrastructure costs:** The capital expenditures needed to extend sewer, water, power, and telecommunications lines for so-called “greenfield” development, and the cost of the upgrading and repair of existing sewer, water, power, and telecommunication lines. (Related Term: “greenfield”)

**Intermodal:** A term referring to the existence of more than one transportation choice coexisting in the same area. Example: A light rail station next to an Amtrak depot and bus transfer station. The term also alludes to passengers’ use of more than one carrier or mode of transportation in a single journey. (Related Terms: “transit”, “multimodal”)

**Intermodal Surface Transportation Efficiency Act (ISTEA):** ISTEA funds are flexible federal funds that can be used for roads, highways, or for transit. The primary requirement is that the proposed project aims to be part of “...a National Intermodal Transportation System that is economically efficient, environmentally sound...”<sup>iv</sup> (Related Terms: “Intermodal Surface Transportation Efficiency Act,” “Transportation Equity Act of the 21<sup>st</sup> Century,” and “Surface Transportation Program”)

**internal capture rates:** The rate at which trips remain internal to a neighborhood. (Related Term: “internal vehicle trips”)

**internal vehicle trips:** Trips that are completed within the neighborhood of origin. (Related Term: “internal capture rates”)

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<sup>i</sup> City of Oakland: Housing Development Program  
<http://www.oaklandnet.com/government/ceda/revised/notice.html>

<sup>ii</sup> Metropolitan Transportation Commission: Housing Improvement Program (HIP)  
[http://www.mtc.ca.gov/projects/livable\\_communities/lchip.htm](http://www.mtc.ca.gov/projects/livable_communities/lchip.htm)

<sup>iii</sup> INDEX: Software for Community Indicators: [http://www.crit.com/home\\_index.htm](http://www.crit.com/home_index.htm)

<sup>iv</sup> US DOT, Federal Highway Administration: Intermodal Surface Transportation Efficiency Act of 1991  
<http://www.fhwa.dot.gov/environment/istea.htm>

**Interregional Improvement Program:** That part of STIP funding that is used for intercity rail, interregional road, or rail expansion projects outside urban areas or projects of statewide significance.<sup>i</sup> (Related Terms: “California State Funding Sources,” “Surface Transportation Improvement Program”)

**interviewed observers or those interviewed for this study:** This is a reference to the Policy Steering and Technical Advisory Committees that were convened for this study, along with developers, local officials, transit operators, bankers, housing agencies, environmental groups, and special interest groups.

**ISTEA:** See “*Intermodal Surface Transportation Efficiency Act*”

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**jobs/housing balance:** The number of jobs versus the number of available housing units. Ideally, there should be one housing unit for every job in a given area. However, in some job centers, such as in San Jose and Orange County, there is approximately only one housing unit available for every six jobs. (Related Term: “dwelling unit”)

**joint development projects:** The use of publicly owned property in the development of real estate that is either “physically or functionally related” to a transit investment. (Related Terms: “Joint Powers Authority,” and “Joint Powers Agreement”)

**JPA:** See “*Joint Powers Authority*”

**Joint Powers Agreement:** “A joint powers agreement (Government Code section 6500 et seq.) allows two or more agencies to jointly wield powers that are common to them. It does not create new powers, but instead provides a vehicle for the cooperative use of existing governmental powers. Agencies which may enter into joint exercise of powers agreements include the federal and state governments, cities, counties, county school boards, public districts, and public agencies of other states.”<sup>ii</sup> (Related Term: “Joint Powers Authority”)

**Joint Powers Authority (JPA):** An organization that is formed with the purpose of pooling resources and sharing authority. “A JPA can enter into contracts, employ people, acquire, construct and maintain buildings, improvements and public works, and issue revenue bonds. The member agencies can also agree to exchange services.”<sup>iii</sup> (Related Term: “Joint Powers Agreement”)

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**Land assembly:** An early part of the development process in which the developer (or a redevelopment agency) buys adjacent parcels of land and assembles them for use in a new development. (Related Term: “redevelopment agency”)

**Land Use, Transportation and Air Quality (LUTRAQ):** A model developed to measure the difference between allocating future growth (for the year 2010) in typical suburban-style development versus allocating that growth to occur according to a TOD-based

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<sup>i</sup> State Funding Categories, Metropolitan Transportation Commission  
[http://www.mtc.ca.gov/publications/funding\\_guide/fund\\_guide-hm/funding\\_guide07.htm](http://www.mtc.ca.gov/publications/funding_guide/fund_guide-hm/funding_guide07.htm)

<sup>ii</sup> Chapter 7 of “A Planners Guide to Financing Public Improvements”, CERES  
<http://ceres.ca.gov/planning/financing/index.html#anchor295636>

<sup>iii</sup> *Ibid.*, Planners Guide



growth pattern. This showed that by simply changing the location of *future* growth, substantial travel savings could be realized.<sup>i</sup>

**lane miles:** A measure of the length and capacity of a roadway. For example: A four-lane highway stretching 1000 miles has 4000 lane miles.

**LANI:** Acronym for “*Los Angeles Neighborhood Initiative*”

**Lease requirement:** See “*lease-up requirement*”

**Lease-up requirement:** A condition on many loan applications for development projects, that requires the developer to seek out and obtain a certain percentage of leases for the planned project. For example, a lender may require a developer planning to build 100 apartment units to obtain a 50% lease-up. In other words, the developer needs 50-signed leases in order to proceed with the project.

**LEM:** See “*Location Efficient Mortgage*”

**level of service (LOS):** A grading system used to gauge the type and quality of service that a particular roadway/transit-line has (with “A” being very good, & “F” being very bad). For example, some of the factors that are measured for roadway LOS are: the ratio between automobile volume to road capacity, type/duration of congestion, and collision risk/frequency.

**light rail (LRT):** Relatively lightweight rail cars that operate on fixed rails that are not necessarily separated from automobile traffic for much of their route. Light rail cars are powered by electricity from overhead electric lines. Also known as “streetcar,” “tramway,” or “trolley car.” (Related Term: “commuter rail,” “heavy rail,” “transit”)

**LIHTC:** See “*Low Income Housing Tax Credit*”

**Livable Communities:** Examples: Progressive land use, high density zoning near rail stations, transit-oriented development, walkable communities (e.g. pedestrian-oriented development), etc. (Related terms: “Transit-Oriented Development,” “New Urbanism,” “pedestrian-oriented development,” and “neo-traditional design”)

**Local Government Parking Management Handbook:** See “*Using Demand-Based Parking Strategies to Meet Community Goals*”

**local improvement district (LID):** A minor governmental subdivision having the power of taxation established to install a public **improvement** (e.g., water, sewer, etc.) in an area. A LID must typically be approved by at least 50% of the property owners, and funds can be used for developing shared parking lots, maintenance, lighting, and signage.

**Local/Regional Funding Sources:** See Table 7.3 in Chapter 7, and Appendix for Chapter 7.

**Location Efficient Mortgage (LEM):** LEM is a mortgage instrument with which a lender takes into account the reduced per household transportation costs that exist in TOD or TOD-like developments (i.e. areas located near high-quality transit). This proximity thereby increases the purchasing power of a homebuyer.

**Los Angeles County Metropolitan Transportation Authority (MTA):** “MTA serves as transportation planner, coordinator, designer, builder and operator for Los Angeles county.”<sup>ii</sup>

**LOS:** See “*level of service*”

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<sup>i</sup> 1000 Friends of Oregon: Vision to Action: <http://www.friends.org/resources/lutraq.html>

<sup>ii</sup> LA County Metropolitan Transportation Authority (MTA): <http://www.mta.net/>

**Low Income Housing Tax Credit (LIHTC):** Federal funding source that can be used for the construction of affordable housing (low to moderate income households). Until the year 2000, every state received a tax credit of \$1.25 per person that can be allocated towards housing that meets the guidelines of the program. <sup>i</sup> (Related Terms: “federal funding sources”, “affordable housing”, and “tax credits”)

**LRT:** See “*light-rail*”

**LUTRAQ:** See “*Land Use, Transportation and Air Quality*”

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**MARTA:** See “*Metropolitan Atlanta Rapid Transit Authority*”

**Maryland Mass Transit Administration (MD MTA):** Transit agency serving the state of Maryland that operates light, heavy and commuter rail along with buses. (Related Terms: “transit”, “light rail”, “heavy rail”, and “commuter rail”) <sup>ii</sup>

**Maryland Transportation Authority (MDTA):** Organization that is responsible for “managing, operating and improving Maryland’s toll facilities, as well as for financing new revenue-producing transportation projects.” <sup>iii</sup>

**MD MTA:** See “*Maryland Mass Transit Administration*”

**MDT:** See “*Miami-Dade Transit*”

**MDTA:** See “*Maryland Transportation Authority*”

**memoranda of understanding (MOUs):** Legal document between two persons/organizations that specifically states the terms of an agreement.

**Methane (CH<sub>4</sub>):** A powerful (yet short-lived) greenhouse gas produced through the decomposition of organic matter and by internal digestion by animals. In the presence of Oxygen, Methane breaks down to CO<sub>2</sub>, H<sub>2</sub>O (in the form of water vapor) and heat. CO<sub>2</sub> & water vapor are also greenhouse gases. (Related Terms: “Carbon Dioxide” and “Greenhouse effect”)

**Metropolitan Atlanta Rapid Transit Authority (MARTA):** Transit agency that operates heavy-rail and bus service in the Atlanta area. <sup>iv</sup> (Related Term: “Heavy rail”)

**Metropolitan Planning Organization (MPO):** Designated by the governor and local elected officials as responsible for the transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government. <sup>111</sup>

**Metropolitan Transit Development Board (MTDB):** Transit coordinating agency serving the greater San Diego Area with bus, commuter rail and light rail service. <sup>v</sup> (Related Terms: “transit”, “commuter rail”, “light rail”)

**Metropolitan Transportation Commission (MTC):** MTC is the “transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area”. <sup>vi</sup>

**MHP:** See “*Multifamily Housing Program*”

**Miami-Dade Transit (MDT):** Transit agency serving Miami-Dade county in Florida with bus and heavy rail service. <sup>i</sup> (Related Term: “transit”, “heavy rail”)

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<sup>i</sup> Danter Company: Low Income Tax Credit Program: <http://www.danter.com/taxcredit/>

<sup>ii</sup> Maryland Mass Transit Administration (MD MTA): <http://www.mtamaryland.com/>

<sup>iii</sup> Maryland Transportation Authority (MDTA): <http://www.mdt.state.md.us/>

<sup>iv</sup> Metropolitan Atlanta Rapid Transit Authority (MARTA): <http://www.itsmarta.com/>

<sup>v</sup> Metropolitan Transit Development Board (MTDB) <http://www.sdcommute.com/>

<sup>vi</sup> Metropolitan Transportation Commission (MTC) <http://www.mtc.ca.gov/>

**mitigation:** The process by which a developer compensates the public for some damage that the developer does to a public resource. For example, it may be necessary to cut down a row of trees in order to build a new rail line. To compensate for the loss, the developer may be required to contribute to a tree-planting fund.

**mixed land use:** See “*mixed use*”

**mixed use:** Multiple uses on a particular piece of land. Example: Arterial streets lined with 2-3 story buildings, with retail space on the ground floor and housing or office space on the upper floors. The streets behind the arterial can contain a mix of housing types that are clustered near key features of the community (e.g. parks, community centers, schools etc.). Consequently, community members only have to walk a short distance in order to meet many of their daily transportation needs. (Related Term: “mixed-use TOD”)

**mixed-use TOD:** TOD that includes retail, office, and/or civic elements. Often, mixed-use developments require separate appraisals, and sometimes separate financing, for each land use. This is one of the noted barriers to TOD implementation. (Related Terms: “TOD design principals”, “mixed-use”)

**mode share:** Percent share that a particular type of transportation mode (i.e. car, bus, rail, plane etc.) has in relation to other modes. (Related Term: “transit mode share”)

**mortgage instruments:** A multitude of different methods by which a developer/land purchaser can borrow money. Examples include, but are not limited to: fixed, balloon and adjustable rate mortgages, construction loans, and specialized loans. (Related Term: “Private Funding Source”)

**MOU:** See “*memoranda of understanding*”

**MPO:** See “*Metropolitan Planning Organization*”

**MTA:** See “*Los Angeles County Metropolitan Transportation Authority*”

**MTC:** See “*Metropolitan Transportation Commission*”

**MTDB:** See “*Metropolitan Transit Development Board*”

**multifaceted environments:** Areas that have a diversity of building types, recreational opportunities, and shopping opportunities.

**Multifamily Affordable Financing Program:** Please see Appendix for Chapter 7 (Related Term: “Private Funding Source”)

**Multifamily Housing Program (MHP):** State funding used for “new construction, rehabilitation, and preservation of permanent and transitional rental housing for lower income households.”<sup>ii</sup> (Related Term: “California State Funding Sources”)

**multimodal:** An intermodal transit station with more than three transportation choices available. (Related Terms: “intermodal”, “transit”)

**MUNI:** See “*San Francisco Municipal Railway*”

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**NAAQS:** See “*National Ambient Air Quality Standards*”

**National Environment Protection Act (NEPA):** Provides for an environmental impact analysis process that is required of any development project that uses federal monies. (Related Term: “Federal Funding Sources”)

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<sup>i</sup> Miami-Dade Transit – Welcome Aboard <http://www.co.miami-dade.fl.us/transit/>

<sup>ii</sup> California Department of Housing and Community Development: Multifamily Housing Program (MHP) <http://www.hcd.ca.gov/ca/mhp/>

**National Ambient Air Quality Standards (NAAQS):** A set of criteria established and maintained by the US EPA (under mandate from the Clean Air Act) that sets the minimum safe levels for pollutants considered harmful to public health and the environment. <sup>i</sup> (Related Terms: “health effects of smog”, “EPA”)

**Neighborhood TOD:** A TOD with an emphasis on residential use that usually has locally oriented shopping facilities that are primarily focused on serving the needs of the neighborhood’s population. (Related Term: “transit-oriented development”)

**net acre:** That part of land that is not open space or covered by roads.

**neo-traditional design:** Neighborhood design that contains a mixture of land-uses, housing types, and architectural diversity. Other elements include: a centrally located commons (gathering/meeting place), shopping opportunities, interconnected streets/alleys, and pedestrian-oriented greenbelts. All of these facilities are placed within walking distance of residents. (Related terms: “pedestrian-oriented development,” “New Urbanism,” and “livable communities”)

**NEPA:** See “*National Environment Protection Act*”

**net acre:** Land area, not including streets or open space. (Related Term: “gross area”)

**New Markets Tax Credit:** Federal tax credit that aims to encourage private sector investment into low- to moderate-income rural and urban communities. <sup>ii</sup> (Related Terms: “Federal Funding Sources”)

**New Markets Venture Capital Program:** Federal program which aims to encourage capital investment in low-income communities. <sup>iii</sup> (Related Term: “Federal Funding Sources”)

**new rail project:** See “*rail start*”

**New Urbanism design:** A set of design criteria that aims to create attractive pedestrian-and/or transit-oriented communities. Many New Urbanism designs are reminiscent of pre-WWII era downtown communities serviced by streetcars. Other New Urbanism designs are more reminiscent of pedestrian-oriented European developments. However, density is not necessarily a component of New Urbanism design (narrow streets, wide sidewalks, and buildings situated in close proximity to one another are design elements).

(Related Terms: “pedestrian-oriented development”, “transit-oriented development”, “greenbelt”, “greenfield”, “livable communities”)

**NIMBY:** Acronym for “**Not In My Back Yard**”. It is the tendency of residents to reject development projects in their neighborhood due to perceived negative qualities of the type of project proposed. For example: An affluent neighborhood may resist a proposal to build an affordable housing project in their area due to the perceived connection between such projects and declining property values.

**nitrous oxide (NOx):** By-product of internal combustion found in car exhaust. NOx is a pollutant that has been determined to be hazardous to human health and regulated under EPA's National Ambient Air Quality Standards. (Related Terms: “Health Effects of Smog,” “hydrocarbons,” “Carbon Monoxide,” and “Reactive Organic Gas”)

**NNN:** See “*triple net lease*”

**NOx:** See “*Nitrous Oxide*”

<sup>i</sup> National Ambient Air Quality Standards: <http://www.epa.gov/airs/criteria.html>

<sup>ii</sup> US Department of the Treasury, Community Development Financial Institutions: New Markets <http://www.cdfifund.gov/programs/newmarkets/>

<sup>iii</sup> US Small Business Administration: The New Markets Venture Capital Program <http://www.sba.gov/INV/overviewventure.html>

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**overlay zone:** A special purpose type of zoning that is superimposed on top of the regular zoning map. Example: TOD overlay zone centered around a high availability transit stop (e.g. a Light Rail station). (Related Term: “transit”, “light rail”)

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**Park-and-ride lot:** A parking area beside a transit stop. Transit riders who leave their personally operated vehicle behind as they board either a bus or a train use park-and-ride lots. (Related Terms: “transit” and “personally operated vehicle”)

**parking ratio:** The number of parking spaces available versus the number of dwelling units (for residential developments), or the total square footage of retail/commercial/office space. (Related Term: “dwelling unit”)

**Pedestrian Environment Factor (PEF):** A modeling technique most notably used in the LUTRAQ project in order to measure pedestrian environmental quality. It is a way of generating a composite index of the pedestrian friendliness of each portion of an area (referred to as transportation analysis zones) used in the travel mode. (Related Term: “Land Use, Transportation and Air Quality”)

**pedestrian-oriented development (POD):** Also called pedestrian-friendly design, creates an environment in which walking, along with the use of a bicycle, are both pleasant and inviting experiences. Good POD provides welcoming pedestrian facilities, such as: benches, fountains, ash trays, parks, wide sidewalks, public squares and other gathering places, kiosks, and quality transit information. (Related Term: “walking accessibility”)

**PEF:** See “*Pedestrian Environment Factor*”

**personally operated vehicle (POV):** Privately owned vehicle that is used for personal travel, commuting, and/or for running errands. (Related Terms: “automobile”, “single occupant vehicle”)

**Peter Calthorpe:** developed one of the earliest TOD general plans in the country (for Sacramento Regional Transit in 1990), and has written several books on TOD and Smart Growth practices. (Related Term: “Sacramento Regional Transit”)

**Petroleum Violation Escrow Account:** State funding derived from penalties that are levied against oil producers. Expenditure of these funds is required to benefit energy consumers through (among other things) improvements in transportation energy efficiency. <sup>i</sup> (Related Term: “California State Funding Sources”)

**PLACE<sup>3</sup>S:** Acronym for **PL**Anning for **C**ommunity **E**nergy, **E**conomic and **E**nvironmental **S**ustainability. PLACE<sup>3</sup>S is an innovative planning method that fully integrates focused public participation, community development and design, and geographic information systems to form an urban planning tool that is designed to help communities form an effective plan toward sustainability. It is unique because it employs energy as a yardstick to measure the sustainability of urban design and growth management plans. <sup>ii</sup> (Related Terms: “Geographic Information Systems,” “INDEX,” and “public participation”)

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<sup>i</sup> California Legislative Analyst’s Office: Petroleum Violation Escrow Account  
[http://www.lao.ca.gov/analysis\\_2001/general\\_govt/gen\\_04\\_CC\\_PVEA\\_anl01.htm](http://www.lao.ca.gov/analysis_2001/general_govt/gen_04_CC_PVEA_anl01.htm)

<sup>ii</sup> The Energy Yardstick: Using PLACE<sup>3</sup>S to Create More Sustainable Communities, DOE  
<http://www.sustainable.doe.gov/articles/place3s.shtml>



**Planned Unit Development (PUD):** PUD's contain independently owned units as well as some commonly held space that is jointly owned. Occupants of the PUD, pay owner's association fees in order to maintain the common areas.

**POD:** See "*pedestrian-oriented development*"

**podium parking:** Parking that is at or partially below ground level beneath a building that is raised above the surrounding area. (Related Term: "structured parking")

**POV:** See "*personally-operated vehicle*"

**Predevelopment Loan Program – City of Oakland:** Local funding source available through the City of Oakland to help finance the initial costs of development. (Related Term: "Local/Regional Funding Sources")

**Private Funding Sources:** Please refer to Table 7.4 in Chapter 7 and the Appendix for Chapter 7.

**PTA:** See "*Public Transportation Account*"

**Public involvement:** See "*public participation*"

**Public participation:** Systematic provision for affected persons/ organizations/ communities to be informed about and participate in decision-making processes. It centers on effective, open exchange and communication among partners, agencies, organizations, and all affected persons.<sup>112</sup> (Related Term: "PLACE<sup>3</sup>S", "CEQA")

**Public Transportation Account (PTA):** All state derived tax revenues earmarked for transit capital improvement projects are placed in this account. 50 % of these funds go to the California Department of Transportation for intercity rail etc., 25 % goes to County/City mass transit based on population, and the remaining 25 % goes to transit agencies based on their fare revenue. (Related Term: "Caltrans")

**PUD:** See "*Planned Unit Development*"

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**rail start:** The first line in a new rail system. (Related Term: "starter line")

**rapid rail:** See "*heavy rail*"

**rapid transit:** Commuter rail, light rail, heavy rail, and bus-rapid-transit (BRT).

**Reactive Organic Gas (ROG):** Gaseous hydrocarbons that break down readily in normal atmospheric and temperature conditions. Inhalation of some ROGs can increase a person's chance of acquiring various types of cancer. Many ROGs are pollutants that have been determined to be hazardous to human health and regulated under EPA's National Ambient Air Quality Standards.<sup>113</sup> (Related Terms: "Health Effect of Smog," "Nitrous Oxide," "Carbon Monoxide," and "hydrocarbon")

**real property:** More commonly referred to as "real estate." Legally, this refers to land held or owned by an individual or an organization.

**Redevelopment agency:** A local governmental entity charged with the facilitation of land redevelopment within its jurisdiction. The primary purpose of these entities is to initiate projects that aim to eliminate urban blight/decay or otherwise increase the physical, scenic, and/or economic "worth" of an area. (Related Terms: "infill development" and "redevelopment")

**Redevelopment:** Development that repairs and/or upgrades the physical structures in a blighted/decayed area. (Related Terms: "Redevelopment agency" and "infill development")

**Regional Improvement Program:** That part of STIP funding that is given to the individual regions of California for use in transportation spending. (Related Terms: "California State Funding Sources" and "Surface Transportation Improvement Program")

**Regional TOD:** A TOD that includes uses that attract consumers/tourists from a broad metropolitan area. (Related Term: transit-oriented development”)

**Request For Proposals (RFP):** The process by which contracts are awarded on a competitive basis to interested developers.

**residential fundamentals:** A technical term used to describe whether or not a particular area has adequate facilities, services, and number of residents necessary to encourage, for example, 24-hour activities. Some residential fundamentals that encourage 24-hour activities are; interesting and relatively safe environments, pedestrian-friendliness, convenient shopping opportunities, interconnected street networks, and easy-to-use and frequent transit service.

**resource lands:** Land that has economic, recreational, and/or scenic value.

**reverse commute:** Increasingly common phenomenon caused when commuters live in an urbanized area and work in a less-urbanized or suburban community. This complicates traffic patterns and leads to traffic congestion in both directions.

**Revolving Loan Fund:** Please see Appendix for Chapter 7 (Related Term: “Private Funding Source”)

**RFP:** See “*Request For Proposals*”

**right-of-way:** Legally enforced preference for one type of transportation system over another on a transportation corridor. For example walking and bicycle travel may be the only legal ways to use a greenbelt. These restrictions may be valid for only part of the day and are not always exclusive (e.g. Light-rail car sharing a vehicle lane with automobiles). (Related Term: “transportation corridor”, “greenbelt”, and “light-rail”)

**Robert Cervero:** Sub-consultant for this project and a leader in the area of TOD-related and transit research. He developed the TOD Design Principles mentioned in this report. (Related Terms: “transit-oriented development”, “transit”, and “TOD design principles”)

**ROG:** See “*Reactive Organic Gas*”

**RT:** See “*Sacramento Regional Transit*”

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**Sacramento Regional Transit (RT):** Transit agency that operates light-rail and bus service in the greater Sacramento California area. <sup>i</sup> (Related Term: “light-rail”)

**San Francisco Municipal Railway (MUNI):** Transit agency operating light-rail, bus, and streetcar service in San Francisco California. <sup>ii</sup> (Related Term: “light-rail”)

**Santa Clara Valley Transportation Authority (VTA):** Transit and transportation planning agency that serves the Santa Clara Valley in California with light-rail and bus service. <sup>iii</sup> (Related Term: “light-rail”, “transit”)

**Section 108 Loan Guarantee Program:** Federal program that “enables States and local governments participating in the Community Development Block Grant (CDBG) program to obtain federally guaranteed loans that can help fuel large economic development projects and other revitalization activities.” <sup>iv</sup> (Related Terms: “Federal Funding Sources” and “Community Development Block Grant Program”)

**Section 5309:** See “*Federal Transit Act Section 5309 Grant Program*”

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<sup>i</sup> Sacramento Regional Transit <http://www.sacrt.com/>

<sup>ii</sup> San Francisco Municipal Railway <http://www.sfmuni.org/>

<sup>iii</sup> Santa Clara Valley Transportation Authority <http://www.vta.org/>

<sup>iv</sup> US Department of Housing and Urban Development: Section 108 Loan Guarantee Program <http://www.hud.gov/progdesc/cdbg-108.cfm>



**secure land use entitlements:** The process by which a developer is granted permission (i.e. obtains permits) to use a particular parcel(s) of land.

**SEPTA:** See “*Southeastern Pennsylvania Transportation Authority*”

**sf:** See “*square feet*”

**Short Term Planning Grants:** Various federal funding sources.<sup>i</sup>

**Single-Occupant Vehicle (SOV):** A personally operated vehicle whose only occupant is the driver. (Related Term: “personally operated vehicle”)

**SIP:** See “*State Implementation Plan*”

**smart community:** A community that incorporates traditional characteristics of successful cities by including a mix of residential and commercial uses, combined in a pedestrian-friendly configuration.

**Southeastern Pennsylvania Transportation Authority (SEPTA):** Transit agency that provides southern Pennsylvania with bus, light rail, heavy rail and commuter rail service.<sup>ii</sup> (Related Terms: “transit”, “light rail”, “heavy rail”, and “commuter rail”)

**SOV:** See “*Single Occupant Vehicle*”

**spatial mismatch problem:** A situation that has arisen as more new jobs are created in ever distant locations which are inaccessible to a high percentage of lower-skilled, lower-income workers who live in more central areas. (Related Terms: “Gentrification” and “jobs/housing balance problem”)

**specific plans or specific area plans:** A legal tool authorized by Government Code Section 65450 *et seq.* for the systematic implementation of the general plan for a defined portion of a community's planning area. A specific plan must specify in detail the land uses; public and private facilities needed to support the land uses; phasing of development; standards for the conservation, development, and use of natural resources; and a program of implementation measures, including financing measures. (Related Term: “general plan”)

**sprawl development:** See “*conventional development*”

**square feet:** A measure of area. For example, a typical two bedroom home should have a floor area of about 1000 square feet. (Related Term: “Floor Area Ratio”)

**starter line:** The first established route in a transit system. (Related Term: “transit”)

**State Funding Sources:** See “*California State Funding Sources*”

**State Implementation Plan (SIP):** Plans that aim to attain the national ambient air quality standards (NAAQS) for various pollutants. The Federal Clean Air Act requires each state to develop a SIP to attain the NAAQS by the applicable attainment deadlines. Upon approval by EPA, SIP requirements can be enforced against regulated sources by EPA and by any citizen.<sup>114</sup>

**State Transit Assistance:** State funds that are used for the development and support of public transportation in California. (Related Terms: “California State Funding Sources” and “transit”)

**State Transportation Improvement Program (STIP):** A method of allocating state transportation funds. It is funded through a variety of federal and state revenue sources and is implemented through a variety of programs. 75 percent of STIP funds are designated for the Regional Transportation Improvement Program (RTIP) while the remaining 25 percent are designated for the Interregional Transportation Improvement Program (ITIP) with projects chosen by the CA DOT. (Related Term: “California State Funding Sources”)

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<sup>i</sup> U.S. Department of Commerce, Economic Development Administration: Grant Requirements  
[http://www.doc.gov/eda/html/1h\\_grantreq.htm](http://www.doc.gov/eda/html/1h_grantreq.htm)

<sup>ii</sup> Southeastern Pennsylvania Transportation Authority <http://www.septa.org/>

**STIP:** See “*State Transportation Improvement Program*”

**STP:** See “*Surface Transportation Program*”

**strip mall:** Automobile-oriented retail development with surface parking in-between retail shops and nearest street/sidewalk. Smaller version of “big-box” retail. (Related Terms: “automobile oriented development,” “surface parking,” and “big box retail”)

**structured parking:** Parking contained within a specialized building either above or below ground. Parking spaces in structures can cost from \$10,000 to \$25,000 each<sup>115</sup>, compared to about \$5,000 per space for surface parking (depending on underlying land values, local conditions, type of parking structure [e.g., above or below ground], landscaping, and architectural quality). Many localities and/or transit agencies currently require developers to pay for the replacement of surface parking with structured parking. (Related Terms: “surface parking”, “podium parking”)

**surface parking:** Parking that wholly exists at the ground level. This is in contradiction to ‘structured parking’, which provides multiple levels of parking. (Related Terms: “structured parking”, “podium parking”)

**Surface Transportation Program (STP):** Federal Highway Administration definition: “The STP provides flexible funding that may be used by States and localities for projects on any Federal-aid highway, including the National Highway System, bridge projects on any public road, transit capital projects, and public bus terminals and facilities. ”STP provides federal funds from ISTEA and now TEA-21.<sup>i</sup> (Related Terms: “Federal Funding Sources,” “Intermodal Surface Transportation Efficiency Act,” and “Transportation Equity Act of the 21<sup>st</sup> Century”)

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**TAD:** See “*transit-adjacent development*”

**Tax abatement:** A program used by redevelopment agencies to encourage infill and redevelopment of blighted/neglected urban areas whereby taxes are not charged for a given period of time. (Related Terms: “redevelopment agency”, “infill development”, “redevelopment”)

**Tax Credits – Low Income Housing:** Partial federal tax waivers that are given to developers who are building a qualified affordable income housing development.<sup>ii</sup> (Related Terms: “Federal Funding Sources”, “Low Income Housing Tax Credit”)

**tax increment financing (TIF):** Tax Increment Financing is a technique, allowed under California Redevelopment law, in which projected increase in property taxes for a particular property is used to help finance a development project for that property. Specifically, TIF funds arise from the difference in tax revenue that a municipality would collect from the property without new development versus the amount of tax revenue that will be collected with the new development. For example: An abandoned building generates very few tax dollars. A municipality can attract a developer to redevelop the building into a TOD by offering the developer TIF funds. The developer builds the project and repays the municipality through property and other taxes that are in excess of the tax revenue the municipality would collect if the new development did not occur.

**TCRA:** See “*Traffic Congestion Relief Act*”

**TCRP:** See “*Transportation Congestion Relief Program*”

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<sup>i</sup> Department of Transportation, Federal Highway Administration: Surface Transportation Program  
<http://ostpxweb.dot.gov/livabili/STP.htm>

<sup>ii</sup> United States Internal Revenue Service: Low-Income Housing Credit  
[http://www.irs.gov/prod/bus\\_info/mssp/lihc-1.html](http://www.irs.gov/prod/bus_info/mssp/lihc-1.html)

**TCSP:** See “*Transportation and Community and System Preservation*”

**TDR:** See “*Transferable Development Right*”

**Technical Assistance Grants (TAG):** Federal funding source that can be used to help pay for the type of technical assistance needed to clean up Superfund sites. <sup>i</sup> (Related Terms: Federal Funding Sources”)

**TAG:** See “*Technical Assistance Grants*”

**TE:** See “*Transportation Enhancement*”

**TEA-21:** See “*Transportation Equity Act of the 21<sup>st</sup> Century*”

**TFA:** See “*transit focus area*”

**TFD:** See “*Transit-Focused Development*”

**TIF:** See “*tax increment financing*”

**TLC:** See “*Transportation for Livable Communities Program*”

**TMA:** See “*transportation management association*”

**TOD design principals:** Good TOD follows Dr. Robert Cervero’s “Three D’s,” Density, Design and Diversity. TOD also orients buildings and the use of public spaces in order to make pedestrian movements convenient and pleasant. TOD must also have good transit within ¼ to ½ a mile from the TOD. (Related Terms: “density”, “transit-oriented development”, “pedestrian-oriented development”, and “transit”, “Robert Cervero”)

**TOD:** See “*Transit-Oriented Development*”

**tract housing:** Automobile-oriented housing development covering a large area of land that is characterized by a homogenous blend of (at most) several housing floor plans. The result is seemingly endless rows of nearly identical homes. (Related Term: “automobile-oriented development”, “dispersed development pattern”)

**Traffic Congestion Relief Act (TCRA):** A proposed ballot initiative written by the Planning and Conservation League (a coalition of environmental groups). If enacted, TCRA would dedicate the state’s share of sales tax revenues on new and used cars and trucks sold in California, to transportation projects, instead of transferring it to the state general fund. <sup>ii</sup>

**Tranche:** See “*Bond Tranche*”

**Transferable Development Right (TDR):** The right of a property owner to build on his or her property at a certain density. For example, if a property owner who wishes to develop his or her property at an increased density may purchase the TDR rights of another property owner. <sup>iii</sup>

**transit:** Transit is the truncated form of “mass transportation.” Transit refers to any means of publicly available travel by which a significant number of people are transported at a single time. This includes, but is not limited to: bus (including Bus Rapid Transit), ferry stations, light, heavy, commuter, and intercity/regional rail. (Related Terms: “Bus Rapid Transit,” “Amtrak”, “commuter rail,” and “light rail”)

**transit adjacent development (TAD):** Term developed by G.B. Arrington (consultant to this project) to describe development that is in close proximity to transit, but has not been significantly influenced by it in terms of design, parking ratios or mixture of uses. This is in

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<sup>i</sup> Environmental Protection Agency: Technical Assistance Grants (TAG)  
<http://www.epa.gov/superfund/tools/tag/index.htm>

<sup>ii</sup> Planning and Conservation League: Transportation  
<http://www.pcl.org/transportation/summary.html>

<sup>iii</sup> Issues Impacted by Takings Law, Institute for Local Self Government  
[http://www.ilsq.org/doc.asp?intParentID=272#\\_TDR\\_Programs](http://www.ilsq.org/doc.asp?intParentID=272#_TDR_Programs)

contrast to TOD, where transit is a central design feature. (Related Terms: “transit-oriented development”, “mixed use”, and “transit”)

**transit focus area (TFA):** See “*Transit-Oriented Development*”

**transit-focused development (TFD):** See “*Transit-Oriented Development*”

**transit friendly:** Facilities, developments, or generalized organization that tends to increase the use of public mass transportation or that otherwise increases the accessibility of transit. (Related Term: “transit”)

**transit friendly zoning:** Zoning that encourages one or all of the following: mixed-use, compact development, and/or linear street grid. (Related Terms: “transit,” “mixed-use,” and “compact development”)

**transit mode choice:** Type of mass transportation that is chosen and/or used by a person or persons. (Related Terms: “transit,” “light rail,” “commuter rail,” and “bus rapid transit”)

**transit mode share:** This term can be used to describe either the percentage of trips using transit or the percentage of trips using a particular type of transit. (Related Term: “transit”)

**transit occupancy tax:** A tax, charged by a municipality to help pay for public transit. For example, a city may impose a 10% hotel room tax to pay for transit.

**transit-oriented development (TOD):** “Moderate to higher density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.”<sup>i</sup> (Related Terms: “pedestrian-oriented development” & “livable communities”)

**transit-supportive development:** See “*transit-oriented development*”

**transit village:** See “*transit-oriented development*”

**Transit Villages Act (TVA):** This 1994 act provides for cities and counties to prepare transit village development districts that are centered on transit stations with a mix of uses. TVA stipulates that local, regional, and state plans should direct development close to transit stations, and it also establishes that transit village plans are eligible for transportation funding. However, this act does not provide specific funding. (Related Terms: “transit”, “mixed-use”, “overlay zone”)

**transponder:** A device placed on a transit vehicle that transmits a signal to the control system of traffic lights. Usually, the signal sent is a command to lengthen green lights to allow transit vehicles to minimize their wait at red lights. (Related Term: “Bus Rapid Transit”)

**Transportation and Community and System Preservation (TCSP):** Federal funding for “research and grants to investigate the relationships among transportation, community and system preservation and private sector-based initiatives.”<sup>ii</sup> (Related Term: Federal Funding Sources”)

**Transportation Congestion Relief Program (TCRP):** TCRP provides significant additional new funds for transportation. Nearly seventy percent of the TCRP funds are allocated to transit projects, including several parking structures for TOD. Funding for the TCRP is provided by state sales tax on the sale of gasoline (as opposed to “gas tax” revenue), and therefore is not subject to the limitations of Article XIX of the state constitution. (Related Term: “Article XIX”)

**transportation corridor:** Examples: highways, roads, rail lines etc.

**Transportation Enhancement (TE):** A federal program that provides funding for mitigation and enhancements related to transportation facilities.

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<sup>i</sup> The Technical Advisory Committee of this project developed this definition.

<sup>ii</sup> U.S. Department of Transportation, Federal Highway Administration: <http://www.fhwa.dot.gov/tcsp/>

**Transportation Equity Act of the 21<sup>st</sup> Century (TEA-21):** Federal funding source that can be used to provide flexible federal funds to pay for TOD planning at the local level. The funds can be used for roads, highways, or for transit. <sup>i</sup> (Related Term: “federal funding sources”)

**transportation facility:** Any type of structure used to provide or enhance a public transportation mode or increase its efficiency. Current examples include: Park-and-ride lots, bus and rail terminals, parking structures, pedestrian facilities, freeway on/off ramps, etc. (Related Terms: “Park-and-ride lots” and “structured parking”)

**Transportation for Livable Communities Program (TLC):** Local funding source (via MTC) that provides “planning grants, technical assistance and capital grants to help cities and nonprofit agencies develop transportation-related projects” which fit a certain livable communities profile. <sup>ii</sup> (Related Terms: “Local/Regional Funding sources” and “Metropolitan Transportation Commission”)

**transportation management association (TMA):** Formal organization of businesses and local governments who are dedicated to solving local transportation concerns.

**transportation purpose:** The quality of being a transportation facility. (Related Term: “transportation facility”)

**travel mode:** The method of travel used.

**Tri-Met:** The transit agency serving Portland Oregon with bus and light-rail service. <sup>iii</sup> (Related Term: “light-rail”)

**triple net lease (NNN):** Lease in which the tenant is directly responsible for all of the costs that relate to the asset being leased. Leaser may be responsible for maintaining certain parts of the physical structure and occasionally parking.

**TVA:** See “*Transit Villages Act*”

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**urban form:** The way in which an urban area is built (size, shape, organization).

**Urban Growth Area:** Areas where urban growth will be encouraged in the future. Cities must be located inside urban growth area. Once established, cities cannot annex land outside the urban growth boundary. Growth outside of the urban growth boundary must be rural in character. <sup>116</sup> (Related Term: “Urban Growth Boundary”)

**Urban Growth Boundary (UGB):** Method to help direct population growth to already-developed areas by placing limits on the type of development that may occur outside the boundary. Used to prohibit intensive types of development that would tend to urbanize a rural area. (Related Term: “Urban Growth Area”)

**Urban Predevelopment Loan / Jobs Housing Balance Program:** State funding program whose purpose is to “finance the initial costs of constructing, converting, preserving or rehabilitating assisted housing developments near transit stations.” <sup>iv</sup> (Related Term: “California State Funding Sources”)

**‘Using Demand-Based Parking Strategies to Meet Community Goals’:** Local government parking management handbook. <sup>v</sup>

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<sup>i</sup> U.S. Dept. of Transportation, Federal Highway Admin.: TEA-21 <http://www.fhwa.dot.gov/tea21/>

<sup>ii</sup> Metropolitan Transportation Commission: Transportation for Livable Communities  
[http://www.mtc.ca.gov/projects/livable\\_communities/tlc\\_grants.htm](http://www.mtc.ca.gov/projects/livable_communities/tlc_grants.htm)

<sup>iii</sup> Tri-Met, Transit agency serving the Portland, Oregon area: <http://www.tri-met.org/>

<sup>iv</sup> CA Dept. of Housing and Urban Development: Urban Predevelopment Loan / Jobs-Housing Balance  
<http://www.hcd.ca.gov/ca/uplp-jhbp/>

<sup>v</sup> Victoria Transport Policy Institute: Pavement Busters Guide  
<http://www.vtpi.org/pav-bust.pdf>



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**value capture:** Used to describe TOD-like development around transit stations. The theory was that proper development patterns around a transit station would increase ridership at that station along with generating additional tax dollars. Therefore these monies could then be used to eventually ‘pay’ for the capital costs of building the station. (Related Terms “Transit-Oriented Development” and “transit”)

**vehicle-miles of travel (VMT):** The number of miles driven for a given time period. Often expressed in VMT per household per year. (Related Term: “household”)

**VMT:** See “*vehicle-miles of travel*”

**VTA:** See “*Santa Clara Valley Transportation Authority*”

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**walking accessibility:** Ease with which an individual can walk from home and/or work to desired locations. Examples: wide sidewalks, small block size, pedestrian amenities (i.e. benches, shelters, trees, etc.) multiple and direct routes to destinations. (Related Terms: “pedestrian-oriented development” & “livable communities”)

**Washington Metropolitan Area Transit Authority (WMATA):** The transit agency of Washington D.C. and the surrounding area.

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## Appendix C: TOD Internet Sites:

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<http://www.cnu.org> *Congress for the New Urbanism*, profiles and images of TODs

<http://www.charlotte.com/observer/0217train.htm> TOD activity in Charlotte, N.C.

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[http://www.ci.hillsboro.or.us/Planning\\_Department/Ordinance2793-4-77/Section15.pdf](http://www.ci.hillsboro.or.us/Planning_Department/Ordinance2793-4-77/Section15.pdf) TOD Zoning Ordinance for the City of Hillsboro, Oregon

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<http://www.tri-met.org/communitybuilding.htm> *Tri-Met* Transit-Oriented Development Community Sourcebook of TOD in Portland

<http://www.unitycouncil.org/html/ftvinitiative.html> Fruitvale *BART* Station in Oakland California.

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- <sup>92</sup> *Ibid.*
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